UNIVERSITY OF PENNSYLVANIA

THE ECONOMICS OF SIMON NELSON PATTEN

JAMES LANE BOSWELL

A DISSERTATION
IN ECONOMICS
PRESENTED TO THE FACULTY OF THE GRADUATE SCHOOL IN
PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY

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To

MY WIFE

Whose deep interest and coöperation
have been an inspiration in the
preparation of this work.

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PREFACE

It is unfortunate for students of economics that Simon Nelson Pattern did not bring together and organize his economic doctrines and ideas in a systematic way near the end of his maturity as a thinker. As a result they have not been available without a great deal of effort on the part of the student, and many who would like to know Patten have been able to know him only in a fragmentary way.

It is the purpose of this dissertation to make Patten's contributions to economic thought more accessible to students of economics. His ideas are brought together and organized so that the reader may see Patten's economics as a whole. An attempt is also made to interpret and compare his ideas with those of other leading economists. It is hoped that this dissertation will be a great help to those teachers and students of economics who are not entirely satisfied with the Neo-classical Economics presented in most texts.

The author is greatly indebted to many friends at the University of Pennsylvania for their encouragement and assistance in the preparation of this dissertation. He is particularly indebted to Dr. S. Howard Patterson for many helpful suggestions in the organization of the material, and to Dr. J. Lynn Barnard, of Ursinus College, who placed his library at the disposal of the author and in other ways afforded encouragement and assistance.

The interpretations placed upon the writings of Patten are wholly those of the author, and he alone is responsible for the shortcomings of this dissertation.

JAMES L. BOSWELL

Collegeville, Pa.
April, 1933.

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Biographical Sketch

A. Ancestry and Early Life [1]

Simon Nelson Patten was born in Cossayuna, New York, in 1852. His father, William Patten, had gone West from Washington County, New York, about ten years before and taken out a homestead in Northern Illinois, which became the farm upon which Simon was reared. William built a house and other improvements on the farm and then went back to Washington County to take as a bride Elizabeth Pratt, who returned with him to the Illinois farm. In the fall of 1851 he went to California on a prospecting trip and his wife returned to New York, where Simon was born on May the first the following year.

Young Patten's maternal ancestors were early colonists of Scotch descent. They had come to New England, in 1621, as frontier farmers. As settlements swept on toward the West and South their descendents again sought the frontier and became pioneer farmers in Washington County, New York.

Simon Patten's paternal ancestors were Scotch-Irish who had migrated from Ireland to New York in the last quarter of the seventeenth century. They, too, became farmers in Washington County.

Among Simon's relatives were lawyers and business men of prominence. An uncle of his mother had been a member of the New York State Supreme Court, and another near relative of hers was a federal judge. James Patten, who is reputed to have engineered a great wheat pool, was a cousin of Simon. One brother of the latter became a prominent Oklahoma banker, and another brother

[1] The writer never knew Simon Nelson Patten and, consequently, is indebted to Patten's friends for much of the information contained in this sketch.

The facts of Patten's life are interestingly set forth by Rexford G. Tugwell in the *Journal of Political Economy,* April, 1923, Vol. XXXI, No. 2, pp. 153-208.

Memorial Addresses on the Life and Services of Simon Nelson Patten, published as a supplement to the *Annals of the American Academy of Political and Social Science,* May, 1923, also contains much valuable information.

These sources are largely drawn on in this sketch.

became a resident of Colorado. This all indicates that pioneer blood ran strong in the veins of the Pattens.

Simon's father was a pioneer in a very full sense of the word. He was the first farmer in his county to tile his land, the first to erect a windmill, an experimenter in agricultural methods, a breeder of fine livestock, and the builder and owner of a creamery of 10,000 pounds annual capacity, located upon his farm. His farm buildings were models for the community. His interests transcended that of money making. He was an elder in the Presbyterian Church, a member of the state legislature, and an army captain in the Civil War.

Simon's mother died when he was about four years of age, of typhoid fever contracted while nursing him through the same disease. He soon had as a stepmother a woman from Washington County, New York, who was of the same background and tradition as that of his own mother. As a child his home life seems to have been very pleasant.

Patten soon developed a marked reserve; a tendency to enjoy solitude and meditation. Early in life he exhibited an inclination to think for himself and to question the rigid Presbyterian theology, as well as other currently accepted ideas and codes. His interest in these matters seems to have been from a philosophical and social standpoint, rather than from one of purely personal interest or restraint. He evinced no strong desires to do the unconventional. It is true that he often shocked his elders and associates, but the shocks emanated from his current of new ideas rather than from his conduct. The latter was exemplary except for the fact that he showed but little interest in the farm work. He was looked upon as a lazy youngster.

B. Patten's Education

Simon was one of about thirty children who attended a one-room rural school where mental arithmetic and the memorizing of poetry were greatly stressed. Apparently he was not outstanding as a pupil in this school. He did his routine work in no exceptional manner, and he fairly well succeeded in inhibiting whatever tendencies he had to express shocking ideas. He played baseball and had a school-girl sweetheart, but derived no particular distinction from either. His teachers and classmates seem to have looked upon him as just an average boy.

At the age of seventeen, Simon N. Patten was sent to a preparatory school—Jennings Seminary, at Aurora, which was located about twenty-five miles from his home. This school took itself rather seriously and had much of the collegiate atmosphere. As Simon's father wanted him to pursue a legal career, he entered the Seminary with the idea of preparing to study law. But while there he came under the influence of some stimulating teachers who encouraged his interest in philosophical and social problems. Moreover, he seemed to develop no particular interest in law, although he showed a strong feeling of social responsibility and a strong sense of social injustice. But he was then looking for the basis of justice in philosophy rather than in a single institution such as law.

At the Seminary Patten met Joseph French Johnson, a fellow pupil, and the two formed a close friendship which grew as the years passed. This friendship was of very great significance in Patten's later life.

After five years Patten graduated from the Seminary, and then matriculated at Northwestern University. He remained there only a few weeks. Although he had no interest in farming as a career, he was forced to return to his father's farm.

At the same time, whatever interest Patten had in the study of law continued to wane and his interest in philosophy continued to grow. In the meantime his old friend, Joe Johnson, had gone to Halle, Germany, to continue his study. He and Patten kept up a correspondence. Finally, through Johnson's glowing tales and persistent urging, Patten decided to go to Halle and study philosophy.

During his first year at Halle, Patten took some work in economics under the guidance of Johannes Conrad. Conrad seems to have been a very inspiring teacher. At any rate, Patten's interest in economics soon overshadowed his interest in philosophy, and most of the remainder of his work at Halle was in economics. While at Halle he met and formed a close friendship with Edmund James, who, as we shall see, played an important part in his career later. Patten left Germany in the summer of 1878 with his A.M. and Ph.D. degrees, and returned to the United States by way of England.

Patten was a very uncouth young man. This rendered it rather difficult for him to find congenial work upon his return to the United States. As a result he spent a year upon his father's farm, but he

gave no promise of making a successful farmer. Neither did he show any inclination or aptitude for a business career. Here he was: a young man about twenty-seven years of age, who had been given very exceptional educational opportunities, and at best, it appeared that he was going to be only a second or third-rate farmer. No doubt he was a threatening source of embarrassment to his father, who still thought that his greatest chance for success lay in the legal field. After much urging Simon entered a law school in Chicago in the fall of 1879. But he was there only a few weeks when he was forced to discontinue his work because of the failure of his eyes.

He again returned to his father's farm, where he remained in almost total darkness for about three years. Then he came East to visit his old friend, Edmund James, who was at that time a professor at the University of Pennsylvania. While he was in the East, James took him to an eye specialist in Philadelphia. As a result his eyes showed rapid and great improvement. He then returned to Illinois and got a position teaching in the district school which he attended as a boy. After one year there, he secured a better position in the Homewood, Illinois, public school, and then later taught in Iowa, where he had a still better position.

C. Patten As a Writer

The time which Patten spent in darkness was not wasted. During that period he did considerable thinking and formulated the plans, as well as much of the content of one of his best known books, *The Premises of Political Economy*, which appeared in 1885. Before publication he submitted the manuscript to Joe Johnson, then a newspaper man in Chicago, who criticized his English composition. Johnson found the manuscript practically devoid of punctuation. The first sentence contained fifteen pages. Through Johnson's help the manuscript was finally whipped into shape and published. Patten had no other books published until 1888, the year in which, through the influence of his old friend Edmund James, he came to the University of Pennsylvania as Professor of Political Economy. He remained at the University of Pennsylvania until he retired from the teaching profession in 1917.

Books and magazine articles flowed from the pen of Patten quite steadily from 1888 to 1920. A very large portion of his work con-

sisted of monographs or magazine articles. Most of his books were not large. In all, about eighteen of his publications might properly be classified as books. It seems that all of these books which were published before 1899, with one exception, should be classified as belonging to the general field of economics. The one exception is *The Theory of Social Forces,* which appeared in 1892. It is more properly classed as a book on sociology, although there is a thread of decided economic interest running through it.

The Consumption of Wealth, which is one of his masterpieces, appeared in 1889. This was followed by *The Economic Basis of Protection,* in 1892. He had no books published between 1892 and 1899. During this period his field of interest seemed to shift somewhat to philosophy, psychology, and sociology. To the writer it seems that the shift was more apparent than real. Patten's interest in economics had not waned. He realized that man's economic interests and institutions are not apart from man's other interests and institutions. He was seeking a setting and a background upon which an interpretation of economic phenomena might rest with more assurance.

In 1899 *The Development of English Thought* appeared. It contains 415 pages and is the largest book Patten ever wrote. From that time on none of his books, with two exceptions, dealt with strictly economic phenomena. The two exceptions are *The Theory of Prosperity* in 1902, and *The Reconstruction of Economic Theory* in 1912. In these two books are found few, if any, ideas which he had not advanced or suggested in some previous work. They do, however, help to clarify ideas presented in his earlier works. His magazine articles and monographs, which averaged a little more than four a year from 1888 to 1920, reflect the same general shift or broadening of his field of thought as was exemplified in his books.

D. Patten as a Teacher

As a teacher Patten has had few equals. His great forte seems to have been his ability to encourage and to stimulate his students to think for themselves. He never set himself up in the class-room as a fountain of information or wisdom. Should new light seem to warrant it, he had no hesitancy about reversing the position which he had previously taken on some question under consideration. He did

not shrink from saying something that might shock many of his students. He always appeared to be a seeker after truth, and that spirit was contagious in his class-room. His students felt free to question or challenge any position he took. He in turn enjoyed the privilege of challenging their positions. Give and take seems to have been the rule of his class-room. These informal debates were conducted in an atmosphere of mutual respect. His deep insight into human nature usually enabled him to tell just about when he had pushed a student close to the limit of his mental resources, and at about that point the debate was likely to end in a draw unless the student brought up new ammunition next time the class met.

Patten was very sympathetic and tried to avoid humiliating a student or giving him an inferiority complex. He knew that it was possible to maintain a wholesome debating attitude in the class only if the students felt that they had a fair chance of holding their own. He knew that, outside the speculating fraternity, there are few who will continually come back for more if they lose most of the time. He used psychology in the class-room. His success as a teacher is attested to by the large number of his graduate students who attained prominence as economists and social workers.

Patten played a great part in shaping the Wharton School. In Germany he had seen the university man take an important role in the business life of the country. He hoped to see the Wharton School train men who would likewise play an important part in the business life of the United States. He believed that through the influence of university men in business, industry and commerce would be more humanized and our resources would be utilized more intelligently for the national welfare. In keeping with this attitude he inspired university men to give their attention to such fields as insurance, transportation, foreign trade, merchandising, and labor relations.

E. Patten's Interests—Largely Intellectual

Patten's interests were largely confined to things intellectual. Mere curiosity, however, does not appear to have been his motivating force. He sought the springs of human action as a means of social control. Knowledge was a means to an end. That end was a society which would afford a favorable environment for the continuous progress of the human race.

Because of his absorption in things intellectual, Patten never formed many close attachments in life. He liked people, but did not enjoy the things that most people enjoy. He cared but little for music, literature, or art, or for sports that required much physical exertion. In short, he had but little in common with most people. He never seemed able to meet people in a social way, although he seemed to reach a stage in life when he desired companionship. He played bridge some; both for the love of the game and because of the social contacts which it afforded. Late in life he contracted a rather unfortunate marriage.

After retiring from the faculty of the University of Pennsylvania, he remained in the environs of Philadelphia and continued to write for periodicals. He was a great believer in the power of sentiment. He thought that the loftiest aspirations, both individual and social, could be energized by sentimentalizing them. So he undertook to collect songs which would do for the ideals of social service what songs had done for the ideals of religion. These were published in two small books.

His last book was a novel, *Mud Hollow,* which fell rather flat and added nothing to the esteem in which he was held by his great host of admirers. This, coupled with other disappointments which pressed heavily upon him, probably contributed to his poor health and to his death, which occurred on July 24, 1922.

Chapter I

Patten and Classicism

Simon Nelson Patten was, perhaps, the most original economist the United States has produced. He was, however, thoroughly familiar with the current economic thought of his time and also with the economic thought of preceding generations. Upon it he brought to bear a highly philosophical and speculative mind, and also an experience gleaned from two nations at a time when each was in the midst of a profound economic transition.

At the time the career of Patten started, the Classical theories were in the ascendency in the United States. They were, however, being modified somewhat by the Nationalist School of which Frederick List and Henry C. Carey were representatives, by the German Historical School of which Wilhelm Roscher and Bruno Hildebrand were representatives, and by the Austrian School of which Carl Menger and Bohm-Bawerk were representatives. Out of the impact of these schools of thought on the Classical theories has come what is now known as Neo-Classicism. Patten's thinking was, therefore, done at a time when respect for traditional economic theories was being undermined, when criticism was the vogue, when economists were debating economic theory and method in the professional journals, and when economic theories were being revised.

He made no little contribution to these discussions. The ideas of his predecessors and contemporaries afforded the stimuli for much of his thinking. Yet they more frequently afforded him a point of departure than a pattern. This was particularly true of the Classical theorists, whose influence upon him we shall now consider.

Even though Patten was always under the influence of the Classical method, he found much fault with the assumptions and conclusions of members of that school. He seldom quoted Adam Smith; more often he quoted Thomas Malthus and David Ricardo, but it was to John Stuart Mill that he looked as the exponent of that school, and apparently he was more familiar with the writings of Mill than with those of any other Classicist.

A. Philosophy

1. Materialism and Idealism

One reads but little of Patten before one becomes aware that his economics was based on a vastly different philosophy from that of the Classicists. The Classicists embraced much of the philosophy of the French Revolutionary period. They translated "the equality of men" into "the uniformity of men" and exhibited their product in the form of "the economic man." Under the influence of this conception they very logically sought the cause of the differences in the economic conditions of men, in nature external to man. As an example of one of the fruits of this philosophy, they found rent due to the differences in land. They were materialistic. To some extent Malthus was an exception to this. He found human nature largely responsible for man's economic condition. John Stuart Mill also found, to some extent, that man's economic condition is due to man-made institutions, particularly those institutions governing the distribution of wealth. Yet in the main, the Classical theories were based upon a materialistic philosophy.

In contrast, Patten was an idealist. He believed that man's economic destiny is, to a very great extent, in his own hands. To him man was not a mere product of his physical environment, but also of his social environment. He was not a slave to external nature, but rather the architect of social institutions which profoundly modify economic conditions. As a result we find that Patten stressed conscious social and economic planning, while the Classicists stressed natural laws. Out of the Classical materialistic philosophy developed pessimism. Out of Patten's idealistic philosophy developed optimism.

2. Utilitarianism and Hedonism

Patten and the Classicists in general held to a utilitarian philosophy, but the utilitarianism of the former was quite different from that of the latter. The Classicists held to a utilitarian philosophy which was both individual and social. It was individual in the sense that the conduct of the individual is to be explained in terms of the economic man actuated by motives of economic self-interest. It was social in the sense that the individual motivated by self-interest

conducts himself in such a manner as to promote the economic interests of society as a whole. There was inherent in the utilitarianism of Smith and the Classicists, down even to Jevons, a belief in the harmony of interests and a cosmopolitan economics. In contrast, as Patten appeared to see it, man's conduct is dominated less exclusively by utilitarian calculations than the Classical economists assumed. Although possessed of the optimism of Smith, there is little of his naturalism, based on his assumption of rational self-interest.

By way of illustrating Patten's idea, when man first becomes conscious of a new object his conduct towards it is the result of utilitarian calculations. But upon repetition of his contact with this object his conduct towards it becomes a habit, and finally the habitual action may sink below the threshold of consciousness. Or it may be that by this time certain sentiments or feelings cluster around the object and control his conduct. In short, he may be scarcely conscious of his conduct towards the object or his conduct towards it may be guided by traditions, prejudices, or ideals. In our dynamic world this course of conduct may continue long after utilitarian calculus would throw it into the discard. The habitual action will continue as long as it does not yield a surplus of pain over pleasure. If it finally gets so far out of harmony with the changing environment that it does yield a surplus of pain over pleasure the fact will sooner or later be discovered by some analytical minds, and ultimately utilitarian calculus, with the aid of the evolutionary principle which tends to eliminate the unfit, will lead to the alteration or abandonment of the habit.

At the time of the initiation of the habit and during the earlier portion of the reign of the habit its followers are conducting themselves just as they would if motivated by utilitarian calculus, since the observance of the habit is yielding a surplus of pleasure over pain. But in the later reign of the habit its observers are not conducting themselves as they would if motivated by utilitarian calculus, since its observance is then yielding a surplus of pain over pleasure.

Thus it seems that while utilitarianism presides at both the birth and the death of a habit, it does not act as a guardian angel keeping watch over the habit throughout its career. As a result there is, at any particular time, a hangover of conduct that was well adjusted

to some earlier environment, but out of harmony with the conditions existing at the time. Many acts of great economic significance to the individual and to society are performed with but little if any thought of their economic consequence to either the individual or society. In other words, Patten's psychology is also more realistic than that of hedonism in its premises.

In spite of what has just been said, the writer would class Patten as a social utilitarian. He had no belief in a harmony of individual and social interests at any particular time. He thought that they were often in conflict. But he saw a process of social selection going on by which anti-social conduct is eliminated. He saw no Utopia in which there will ever be a harmony of interest. Human conduct will never become static. The process of initiating habits will continue, and many of these habits will be anti-social. Yet each habit that affects the social interest will ultimately be required to meet the test of social utility, and those habits adverse to the social interests will finally be discarded.

In this there appears to be something akin to the "benevolent hand" which played such an important part in the thinking of Adam Smith. However, it seems to differ from the conception of Smith inasmuch as Smith thought that at any particular time there is a harmony of interest, while Patten thought that at any particular time there is a disharmony of interest; but at the same time there are forces at work tending to eliminate unsocial conduct, and still other forces at work initiating habits which are or will ultimately become unsocial and in turn be eliminated. Those who are theologically minded might say that Patten saw both the devil and the Lord at work in the world, while Adam Smith saw only the perfected work of the Lord. Patten's philosophy led him to a belief in the desirability of conscious social planning of the national economy.[1] It appeared to him that by proper education the conduct of the individual can be brought more nearly into harmony with his own individual interest, and that the conception of individual economic self-interest can be

[1] The above interpretation of Patten is well expressed in his following works:

"The Scope of Political Economy," *The Yale Review*, Nov., 1893, pp. 264-87.

"The Theory of Social Forces," Supp. to *Annals*, January, 1896.

The Economic Basis of Prohibition, Publications of The American Academy of Political and Social Science, No. 29.

modified and given a different perspective in relation to the social interest. In contrast, Smith's philosophy just as logically led to a laissez-faire attitude.

3. Absolutism and Relativity

Patten reacted unfavorably to the absolutism which characterized the economics of the Classicists. He never assumed that he was setting forth economic theories good for all places or at all times. Indeed, he never assumed that such theories were possible. He had grasped the idea of relativity. In general, he tried to set forth theories which he thought were applicable to the United States at the time he wrote, and he would have been the last to ascribe to those theories any universality or perpetualism.

4. The Static and the Dynamic Concepts

Patten reacted unfavorably also to the assumption of a static society, which he thought was fundamental in the Classical economics. Patten's economics was that of a dynamic society. In spite of his alleged disregard of facts, he undertook to be a realist and to present economic theories applicable to the changing conditions which he saw in the United States. In his economics one never finds resort to the phrase "in a given state of the arts" or its equivalent. The society which he saw was always in a state of change. His consciousness of a dynamic society pervades all of his writings. The careful reader of Patten can hardly lose sight of that fact, and the reader of this critique is cautioned to keep it in mind.

The dynamic society which Patten saw was not merely a changing society, it was a society in which the keynote was progress. It was in sharp contrast with the quasi-static state which John S. Mill visioned. The reader might get a better appreciation of this contrast if we digress slightly and give a brief presentation of Patten's theory of progress, which he built out of Spencer's sociology and philosophy.

As conceived by Patten, the cause of the evolution of organisms is found in a series of economic environments of increasing complexity.[2] The cause cannot be found by an examination of organisms them-

[2] As defined by Patten only those elements in man's environment which afford him pleasure or pain are a part of his economic environment. *The Theory of Social Forces,* p. 8.

selves, since they are plastic and can assume many forms. When any economic environment is once occupied by organisms it is soon filled to capacity, and there is no chance for further progress unless another environment of more complexity is found to which the more complex of the organisms can escape and from which the organisms of the lower order of complexity are shut out, because of their inability to cope with the more complex environment. The new economic environment may be another region or it may consist of a better utilization of the region already occupied. The crux of the whole matter is that evolution results from economic pressure and is a means of avoiding competition.

Perfect adjustment to environment and evolution are incompatible. The animal that is perfectly adjusted to its environment is at the end of its evolution because no change which it might undergo would be of any advantage to it in the struggle for existence. Evolution might show itself in a change in the structure of the organs of the animal or it might show itself in a better coördination or organization of the activities of the organs of the animal. Man's hope lies largely in the better organization of his nerve and thought centers.

The economic environment, as has been suggested, not only has a great influence on the development of organisms, but also upon the development of human institutions. When man has reached the stage of development where his only economic activity consists of appropriating the food supplied for the gathering by nature, his power to survive depends very largely upon the intensity of his appetite and physical power to monopolize a part of the region.

Under such conditions strong appetites and aggressive instincts are of more value to man than economic instincts which cause him to utilize his environment more completely. Under the pressure of competition man finally learns that the food which nature furnishes to those with the power to appropriate it constitutes but a small proportion of the food which can be supplied by the region. Man's economic activity, then, gradually shifts from one of appropriation to one of production. His attitude begins to change from one of hostility and aggression toward others to one of coöperation with others in a collective effort to increase the food supply; and along with it habits of industry and saving are developed. This transformation is never sudden nor is it anywhere complete. It is

impeded everywhere by the persistence of ideas and attitudes which hang over from the more primitive stages of development.

Along with this change there arises a moral code which sanctions those forms of conduct which are found most effective in aiding first the individual and then the group in avoiding pain and securing pleasure. The group to which the code applies tends gradually to enlarge and to come into contact with other enlarging groups, which act as modifying influences on each other as they evolve towards their economic goal—avoidance of pain and securing of pleasure. Conduct is good or bad, moral or immoral, as it aids or hinders in the attainment of this goal.

Two processes are at work which tend to destroy those who persist in defying ultimate group interests. These defiers belong to two general classes. First, the unsocial, who in their ruthless self-interest refuse to be tamed and finally destroy themselves by dissipation and selfishness; and second, those who are weak or indolent, or who are so utterly unselfish that they are unable to maintain themselves in the competitive struggle. We thus see two processes at work which tend to bring all of the group to a dead level of uniformity. Progress, however, is not checked because individuals among the group find means of avoiding the competition of others within the group. The means may be a greater power to discover business opportunities, greater power to manage business successfully, greater power for coöperative action, a greater tendency to save, or more efficient consumption. Those who possess these relatively scarce abilities are now in an advantageous position, and they appropriate more and more of the social surplus. Their influence is great. Others ape them, and still others are crowded out and eliminated. Finally society as a whole reaches their level, but still others are now the rather exclusive possessors of rare and useful requisites for avoiding competition, and they in turn are setting standards which all who survive must ultimately attain. And thus the process continues and society moves on under the compulsion of two forces, the one making for uniformity and equality, the other making for progress.[3]

[3] This interpretation of Professor Patten is expressed in *The Theory of Social Forces,* Chapter I.

See also, "The Economic Causes of Moral Progress," *Annals,* Vol. III, No. 2, pp. 129-49.

"The Scope of Political Economy," *The Yale Review,* Vol. II, pp. 264-87.

B. Method

1. Deductive

The deductive method, which was so much in evidence in the writings of the Classicists in general and of Ricardo in particular, was largely used by Patten. Although constantly criticizing the Classicists for their lack of realism, facts played no conspicuous part in his theorizing. Indeed, Patten rarely undertook to disprove theories with facts or to use facts to verify his own conclusions. The Classicists used the deductive method as a matter of course without any serious attempt consciously to justify its use.

Patten thought that its use needed some defense, and he undertook to provide that defense. He asserted that "to show that a mass of facts do not correspond to the conclusions which may be drawn from a given theory, does not disprove the theory. It merely indicates that some other cause is working which prevents the effects of a given theory from being shown by the facts." [4]

As he appeared to see it, there are three kinds of knowledge, each of which is the product of a separate process, and each has its own test of validity.[5] The first kind is truth. This is transmitted or socially imparted knowledge. We judge the validity of this body of knowledge, first, by its logical consistency and agreement with other socially imparted knowledge, and second, by its workableness. The end of knowledge is activity, and for knowledge to become truth it must aid in the attainment of some desired end. In brief, if the knowledge acquired from society meets the tests of consistency, agreement, and utility, we accept it as truth.

The second kind of knowledge is facts. We acquire this knowledge through our sensory processes. Or, as Patten says, "Facts are elements of our direct knowledge and always depend upon evidence of the senses." [6] Their existence or non-existence is certified to by our sensory mechanism. Facts are verified by facts, it would seem, and not by theories.

The third kind of knowledge is values. "They are judgments about means to ends. There can be no values without ends toward

[4] *The Educational Value of Political Economy*, Series I, Vol. V, No. 6, p. 25.
[5] "Pragmatism and Social Science," *Essays in Economic Theory*, p. 262.
[6] *Ibid.*, p. 261.

which activity goes out. . . . A mode of action that reaches ends by the most available route is valuable to the actor, and through it beliefs are generated that impel the act. Values expressed as judgments are beliefs. We have faith only in what we have done or in what society assures us can be done." [7] The test of the validity of a value is the extent to which it enables us to make a successful adjustment.[8] Values, it appears, can be compared only with values and tested by values. Thus, as Patten seemed to see it, there is no one device by which the three kinds of knowledge—truth, facts, and values—can be tested. Nor do they provide valid mutual tests. Any attempt to make some one test absolute is dogmatism.[9]

Whatever one may think about what has just been said, nevertheless it seems that most of Patten's theories were not of the type susceptible to statistical proof or disproof. His theories were of a dynamic society. They were theories of progress, and the results which he expected to flow from them would have their bases in facts only after a long period of time. As examples, there was no place in the world where his theory of consumption, his theory of protection, or his theory of taxation could be adequately tested by facts. In general, he was not dealing with the causes of temporary phenomena, but only with those forces that might give a trend to the long-term curve of economic progress. He thought not in terms of a day or a year, but in terms of decades or generations.

It appears, however, that he is open to justifiable criticism not so much from failure to test his conclusions by facts as from failure to test many of his hypotheses by facts. This seems particularly true in his *Development of English Thought,* where he worked out very intriguing theories based upon untested assumptions such as that the Puritans were killed off by consumption. Further generalizing, one might say that there were many more facts available to test his hypotheses than to test his conclusions. Finally, the unreality of his premises and the deductive scholastic character of his reasoning were all the more apparent because he criticized these very faults in the Classicists.

[7] *Ibid.,* pp. 261-2.
[8] *Ibid.,* p. 264.
[9] *Ibid.,* p. 263.

C. Theories

While Patten was highly theoretical, as were the Classical economists, his theories often had a practical bearing upon some important problems of the day, such as the tariff, standards of living, or taxation, and frequently they shed considerable light on those problems. He was an applied rather than a pure economist. Not applied in the narrow sense of the word, as one who would aid the business man in his problems of finance or marketing, but in the broader sense of one who would point out to society the means by which it might better realize and utilize its human and physical resources. He might be more appropriately called a social-welfare economist.

Many of Professor Patten's conclusions were greatly at variance with those of the Classicists. Since his theories are discussed more in detail later on in this book, it seems advisable at this point to compare only broadly and briefly his more important conclusions with those of the Classicists.

1. Rent

From among the Classicists he drew largely upon Malthus for his theory of rent. As did Malthus, so did he emphasize the social causes affecting rent. He contrasted what we might call a social law of increasing returns with the physical law of diminishing returns, which was fundamental in the Ricardian theory of rent. His social law of increasing returns is an historical law, while the physical law of diminishing returns is a static law which yields the results attributed to it by the Classicists only in a static society if at all. As a consequence he did not agree with the Classicists that in society as it is actually constituted man will find it increasingly difficult to wrest his living from the soil, and that rents will necessarily rise with the lapse of time and the increase of population. He did not accept the idea that profits and rent vary inversely. In fact, he rejected the whole idea that an increase in the amount of the product of industry going to any one factor of production is dependent upon a decrease in the amount going to some other factor.

2. Profits

He rejected the idea of Ricardo and Mill that the rate of profits tends towards a minimum. Their idea was based not only upon a

theory of rent which he did not accept, but also upon assumptions regarding human capacities and competition which he rejected. It assumed that business enterprisers tend to have equal foresight and ability. It assumed that enterprisers have no escape from the leveling effects of competition. It was entirely out of harmony with Patten's theory of evolution and progress, which was presented in an earlier portion of this chapter. It appeared to Patten that in our dynamic society, business enterprisers, due to their varying capacities, are continuously developing new industries, the products of which have higher exchange values in proportion to their expense of production (excluding profits) than those prevailing in the older industries. If this were not true, enterprisers would not forsake the older industries for the newer ones. As industries become well established and their processes highly routine, the profits of those industries do tend towards a minimum. But if society is highly dynamic, as is ours, the effects of the tendency for profits to fall to a minimum are offset by the opening up of new outlets for the enterprisers' abilities, outlets which afford larger profits and at the same time lift some of the competitive pressure from the older industries, and thus tend to raise profits throughout all industry.

3. Population

As might be expected from what has been said of Patten's theory of rent, he rejected the Malthusian Law of Population. Perhaps it was true that population tended to outrun the food supply prepared for it by nature, but it appeared to him that there was no tendency for population to outrun the food supply prepared by man for himself. In the dynamic societies which he had observed he had seen food supplies increase more rapidly than population. He had seen standards of living rise along with an increase in the density of population. Malthus had referred to prudential restraints on the tendency to an increase in population, restraints such as foresight and the desire to save. Patten thought that such so-called restraints are not restraints at all, but that as a result of such prudence capital is saved, the efficiency of human labor is increased, and a more dense population is supported with even higher standards of living. As we have said

of other Classical laws, the Malthusian Law of Population is a law of a static society, and it was rejected by Professor Patten as inapplicable to Western civilization in general and that of the United States in particular.

4. Consumption

Unlike the Classicists, Patten did not relegate consumption to a place of comparative unimportance in his economics. With but little if any exaggeration one might say that consumption was to his economics what value was to that of the Classicists. If consumption were taken out of his economics there would be relatively little left, and that little would hardly be comprehensible. His study of consumption led him to reject the law of diminishing utility as furnishing a tenable basis for the conclusions drawn from it by the Classicists. It appeared to him to be a static law, and in opposition to it he stressed a dynamic law of increasing utility.

5. Value and Surplus

Professor Patten emphasized the subjective aspect of value a great deal more than did the Classicists. He agreed with Senior in attributing to abstinence an important part in the determination of exchange value. He agreed with John Stuart Mill that the exchange value of goods tends to adjust itself to the quantities of the goods demanded and supplied in such a way as to make the two quantities equal. He rejected the idea that the value of reproducible goods tends to equal their cost of production or reproduction. Instead he alleged that with the progress of society the values of goods tends more and more to exceed their costs of production, and that a surplus appears and continues to increase with the progress of society. As a consequence of this and of the law of increasing utility his economy becomes a surplus economy, in contrast to the old deficit economy of the Classicists. With Senior he agreed that the costs of production are subjective, but he ruled out of costs all of those subjective elements which Senior included, except the exertions of labor. He held that the exertions of labor are the sole and only costs of production. In this he harked back to Ricardo.

6. Competition

In contrast with the Classicists, Patten rejects competition as a proper device for industrial regulation. He rejects cheapness as a criterion of efficiency and asserts that competition does not lead to the survival of the fittest. For competition he would substitute coöperation and protective devices such as the tariff.

Chapter II

Patten and Other Schools of Economic Thought

A. Nationalist School

1. Frederick List

Some of Patten's theories show a striking similarity to those held by members of the Nationalist School, particularly to some of the theories of Frederick List and Henry C. Carey. As Patten was familiar with the writings of these men he may have got some of his ideas from them. List and Patten criticized the Classical theory for its failure to recognize national aspirations, for its cosmopolitanism, and for its absolutism.

Like List, Patten emphasized the importance of productive power rather than the accumulation of exchange values. List called attention to the different stages in the economic development of a nation, and indicated that the foreign trade policy of a country should be adapted to its stage of economic development. He did not assert or imply that a nation should follow a protective policy in all stages of its economic development. Neither did Patten make such a broad assertion. Yet there is a strong implication in his writings that a protective tariff should form a part of the permanent policy of the United States, because of its highly dynamic conditions and because of the part which he believed protectionism could play in helping to keep the country in a dynamic condition.

2. Henry C. Carey

Along with Carey, Patten seemed to believe that the civilizing influence of industry and commerce is much greater than that of agriculture. He thought that a diversified industrial life would afford the people of the United States a more favorable environment for the growth of their intelligence, coöperative spirit, and productive powers than would a less diversified industrial development. He asserted that the United States could make its greatest contribution

to world commerce and internationalism only if and when the productive power and coöperative spirit of its people were highly developed within the nation.

Professor Patten agreed with Carey that the Ricardian Law of Rent is based upon a false assumption regarding the order in which land is brought into cultivation. Carey and Patten, in effect, maintained that people first cultivate the light, poor soils because they are easier to farm, and that with the increase of population and knowledge they cultivate the heavier but more fertile soils. In short, when men have only sharpened sticks or crude wooden plows they seek certain kinds of soil which may never prove to be very fertile. In later stages of civilization, with a greater accumulation of experience and capital, they seek other kinds of soil which prove to be far more fertile than those first cultivated. Here again we see the old conflict between the static and dynamic concepts of society.

In concluding this brief comparison between Patten and Carey, we might say that they both took but little stock in the Malthusian Law of Population. Some of Patten's objections to that law have just been mentioned. Here it seems only necessary to add that both he and Carey maintained that there is an antagonism between man's intellectual and generative functions; that the rate at which population increases tends to decrease as man becomes more highly developed. As a result, neither Carey nor Patten displayed any fear of the world becoming over-populated in the sense that the standard of living of the people of a dynamic society would tend towards the subsistence level. That standard of living tends to prevail only in a static society; and in Patten's opinion society is not nor ever will be a static society. The only universal law is that of change, and he was an incorrigible believer in social progress.

B. The German Historical School

1. Similarities

As a student at Halle, Patten had been a pupil of Johannes Conrad, an exponent of the German Historical School; and to a considerable extent Patten reflects the philosophy and spirit of that school. This appears in the interdependent relationship which he thought exists between economics and the other social sciences. Perhaps it accounts for the appearance of *The Development of English*

Thought and *The Theory of Social Forces.* He and the members of the Historical School were in accord in emphasizing the interactions of non-economic with economic motives in human conduct. They were in accord in modifying the Classical concept of individualism and self-interest by the introduction of historical and institutional considerations.

The evolutionary and relativity concepts which permeate Patten's works may have been initiated or strengthened by his contact with the German Historical School. Possibly his concept of a dynamic society was strengthened by his contact with that school. He and members of that school were in accord in the clear-cut distinction which they made between natural and social phenomena, and in the emphasis which they placed on the latter relative to the former.

The idealism and optimism so much in evidence in Patten's writings are likewise found in the writings of adherents to that school. Patten tended to be nationalistic in viewpoint, as did the members of that school. Both he and the members of the German Historical School looked upon the state not merely as an institution for the maintenance of order, but as the organ of the nation for many ends which cannot be attained by voluntary individual action.

2. Contrasts

From the standpoint of method it appears that the German Historical School had but little if any influence upon Patten. Nowhere does he use the statistical method which is associated with the name of Conrad. In the writer's opinion he never used the truly historical method in any of his economic studies, that is, the method of getting at source material and carefully interpreting it. His nearest approach to that method is found in *The Development of English Thought.*

Patten had a very fertile and analytical mind and was, at the same time, a close observer of contemporary phenomena. He had a good perspective, which enabled him to size up his phenomena. But he was not an investigator, and the interrelationships which he saw among social institutions and the evolutionary processes were often only mental concepts arrived at by deductive processes and supported by untested hypotheses. He was a careful student of the historical development of economic thought, but not a careful student of the historical development of institutions.

C. The Austrian School

1. The Subjective Element and the Valuation Process

Patten was very much under the influence of the Austrian School. He laid great stress on the subjective element in the valuation process, as did the Austrians. With him as with them the cost of production ceased to play as important a part in the determination of value as the Classicists had attributed to it. Marginal utility came to play the dominant role in the valuation of consumers' goods, and marginal productivity became a determinant factor in the valuation of producers' goods.

Producers' goods were seen to have a derived or imputed value. The Classical theory of the sequential relationship between value and costs was reversed. The Austrians, and perhaps most of their followers, saw a tendency for costs of production to equal value as a result of the imputation of costs to the agents used in production. Patten saw no such tendency. Instead, he saw a tendency for value to exceed costs.

He did see, however, a tendency for expense of production to equal value. This divergence of opinion between Patten and the Austrians arose out of their different conceptions of cost. According to Patten, costs are confined to the painful exertions of labor undergone in the productive process. On the other hand, the Austrians included as costs all sacrifices undergone in production. The chief elements excluded by Patten and included by the Austrians are abstinence and opportunity costs. A distinguishing characteristic of Patten's economics is the sharp contrast which he drew between costs and expenses of production. In this contrast one finds a large portion of the key to his surplus economy.

2. Interest

Patten's theory of interest was very similar to that of the Böhm-Bawerk wing of the Austrian School. It held that the explanation of interest lies in the valuation process; that people put a higher valuation on the same goods in the present than in the future. Producers use capital or the roundabout productive process because it increases the effectiveness of labor. Capital, which is future goods, gradually ripens into present goods, and with the ripening process there comes

an increase in its value. This increment added to its value by the ripening process is interest. Böhm-Bawerk denied that abstinence in saving is an independent sacrifice, and claimed that counting the sacrifice of labor plus the sacrifice of saving involved in the accumulation of capital is double accounting. He asserted that they were alternate and not cumulative forms of sacrifice.[1]

Patten went so far as to deny that the abstinence involved in saving is a sacrifice. He said:

> It is, of course, painful to abstain from the consumption of food or of other pleasure-giving commodities. To go without bread when hungry, or without clothing when cold, are acts of the same disagreeable nature as those needed to produce food or clothing, and when such acts are necessary for the accumulation of capital they must be classed among the costs of production.
>
> But the ordinary forms of abstinence in a civilized society are not of this character. They are merely abstinence from one form of wealth to get another which the possessor regards as more valuable. While it is painful to abstain from eating bread and remain hungry, it may be pleasurable to go without bread to get meat. To lose a horse without any compensation is painful, but to part with him to get a house would not cause any regrets. Would the owner of the horse reason correctly if he were to claim that his horse cost him 80 units of pain, and that the pain of losing the horse by death would be 90 units, therefore the cost of the house he receives in exchange for the horse is 170 units of pain? Certainly not. We do not feel any pain in parting with an article if we get in exchange for it another article which we value more highly. The sum of our satisfaction is increased without any addition to the sum of our pains.
>
> If we look at the act of saving from a social instead of an individual standpoint, it is easy to see that saving decreases the sum of pain and increases the sum of pleasure. The society that accumulates large quantities of capital has more commodities to enjoy than has a society with less capital. And if other conditions are the same, the first society has less pain to suffer in producing a given quantity of goods; the members need not work so long nor so hard as those who live in the second society.
>
> Again, take a number of isolated producers, each of whom supplies his own wants. Each devotes ten months of the year to procuring his present goods, food, clothing, shelter and the like, and two months to making his tools and other future goods. Suppose these isolated workers join together in one society. They will now work ten months of the year producing present goods, and but two months producing future goods. The advantage of coöperation

[1] *Capital and Interest,* p. 281.

will enable them to supply their present wants in eight months much better than they formerly could in ten months. A larger portion of all the laborers will now be engaged in making future goods, and the cost of producing them will be reduced.

The members of this society have not abstained from consuming any of the present goods. On the contrary, they have more present goods than ever before, and also a larger quantity of future goods. In each item the cost of production has been reduced. There is, therefore, no extra cost for anyone to bear. Yet in this society where there has been no increase of cost there will be an increase of interest. There are more future goods, and these future goods are not to be valued as highly, unit for unit, as are present goods.[2]

The essential difference in the interest theories of Böhm-Bawerk and Patten is this: Böhm-Bawerk implied that there is a sacrifice involved in saving which might be counted in lieu of the sacrifice involved in producing the goods saved, but that it is a mistake to add these two sacrifices and assume that their sum is the total sacrifice involved in accumulating capital. Patten, on the other hand, asserts that ordinarily no sacrifice is involved in saving in modern society.

3. Philosophy and Method

The Austrians contributed nothing new in philosophy or method. Their hedonistic philosophy gave new vigor to the "economic man" of Classical tradition, and their adherence to the deductive method tended to counteract the attack of the German Historical School on that method. Because of these influences, Patten's break with the Classicists was, perhaps, not quite as great as it might otherwise have been.

D. Contemporary American Economists

1. Neo-classicism

At the time Patten was doing his writing, most of the prominent American economists were strongly under the influence of the Classicists, and their efforts were largely devoted to a reconciliation of the Classical, German Historical, and Austrian systems. Out of these three schools Neo-classicism was in process of formation.

[2] "The Theory of Dynamic Economics," *Economic Essays,* pp. 63-64.

It was shown, for instance, that if one calculated the rent of a piece of land according to the Ricardian Law of Rent, he would arrive at the same result as that attained if the rent were calculated according to the Law of Marginal Productivity. Or again, even though the Classicists were wrong in their conception of the causal relation existing between the costs of production and the value of reproducible goods, nevertheless it remained true that the tendency toward the equality of costs of production and value, which the Classicists affirmed, did exist. Still further, even though the Classicists had overemphasized cosmopolitanism and the beneficial effects flowing from the pursuit of individual self-interest, free trade and unfettered competition remained the ideals. In spite of the German Historical School and the influence wielded in other fields of thought by the relativity concept and the evolutionary philosophy, absolutism still held its ramparts. Men and institutions were studied in isolation and under static conditions, while the pose of the relativitist and evolutionist was assumed by hedging behind such phrases as "other things being equal" or "in a given state of the arts."

Had Patten's brilliant mind been accompanied by a less optimistic spirit or a less kindly heart, or had he been less an evolutionist, he probably would have turned cynical or would have given his energy to some other field of endeavor. Being a true evolutionist and optimist, he patiently worked from within the fold, but always with the idea of bringing economic thought into line with the dynamic society which he saw.

His contemporary American economists, through their interests in what he wrote, furnished him a stimulus, and their criticisms helped him to clarify his ideas. He owed but little else to them. His ideas and theirs usually followed divergent paths.

Chapter III

Patten's Economic, Social, and Political Environment

A. The American Economic Environment

1. Rural Economic and Social Conditions in Illinois

The economic environment in which Patten lived no doubt had a great influence upon his economic thought. It should be recalled that as a boy and young man he lived in Illinois when economic and social conditions in that region were undergoing a great and rapid change. He saw the unbroken prairie being transformed into homesteads and farms. This frontier life created in him a certain individualism which permeated his writings.

Patten often saw two farmers settle on land that appeared of equal fertility. One of the farmers diligently tiled his land and prepared it for cultivation, raised bountiful crops, had fine livestock, had excellent fences and other improvements on his farm, rotated the crops on his fields and thus preserved or increased the fertility of his land, sent his children to school and college where they improved their productive powers and became scientific farmers or men of prominence in the commercial and industrial life of the nation, and in general prospered greatly. The other farmer depended upon unsatisfactory drain ditches. It was always late in the spring before the land was dry enough to till. Wet tillage injured the fertility of the soil. His crops were late and often withered by the midsummer's sun or nipped by the autumn's frost. Rather than go to the trouble of preparing new fields for cultivation, he planted those under cultivation in the same crops year after year. Crop rotation was not practiced. The fertility of the soil was not retained. The farmer's financial condition was such that his fences and other so-called improvements were an eye-sore to the community. His children were kept home from school and required to work in the fields in order to help the family eke out an existence. The productive power of his children remained low throughout their lives, and their careers as

men were largely a repetition of that of their father. This man was anything but a prosperous farmer.

To Patten, the differences in the economic conditions of these two farmers were not caused by natural conditions external to man. They were wholly man made. If after many years the first farm was much more fertile than the second, the cause lay in man rather than in external nature. His observation of the two sets of children taught him that the prosperity of a nation depends more largely upon the development of the productive power of its people than upon the immediate creation of exchange values. Ricardo had looked down at the land and found the niggardliness of nature, but Patten looked up into the face of man and found it full of infinite possibilities. In a sense the century-old contrast between Godwin and Malthus was reproduced.

With the lapse of time Patten saw the cradle give way to the reaper and the reaper give way to the self-binder. He saw the flail give way to the horse-driven threshing machine, and the latter in turn give way to the steam-driven thresher. He saw the dirt road give way to the macadamized highway. He saw the railroad span the prairie. He saw the farmer's toil lightened and his productivity increased through the use of more intelligence, more labor-saving machinery, and more coöperation with his neighbors. He saw the physical law of diminishing returns fade into relative insignificance in the presence of a social law of increasing returns. He saw the farmer trade the products of his labor for the food of other climates. He saw the range of the farmer's consumption broaden and his joy of consumption increase. He saw a social law of increasing utility where others had emphasized only the static law of diminishing utility. He saw the farmer pass from the pain economy of the pioneer community to the pleasure economy of the civilized coöperative community. He saw a deficit economy give way to a surplus economy.

2. Changes Accompanying the Growth of Manufacturing Towns

The growth of the manufacturing towns of the Middle West was bringing about changes which, no doubt, greatly impressed Patten. It was bringing about more diversified and intensified farming. It

was then becoming profitable to produce many agricultural products which could not stand a long transportation haul. The farmers' prosperity was no longer dependent upon market and weather conditions favorable for one or two crops. His opportunities to labor and earn were spread more evenly throughout the year, instead of being bunched in the planting and harvesting season of one or two crops. Diversified farming was making it easier to preserve the fertility of the soil. The more intensified farming was accompanied by a greater density of population. Schools and other community interests were being better provided for. The isolation of the farmer was being reduced. His sons and daughters were finding enlarged opportunities in the variety of occupations which were opening up in the towns. A market was being provided for a greater variety of talents and abilities, and it appeared that human resources were being better utilized. These changing conditions, no doubt, had a great deal to do with Patten's ideas about the protective tariff, since he thought that protection was conducive to a diversification of industry.

At the same time education was being stressed, state universities were being founded, and technical education was being emphasized. Great attention was being directed to the development of productive power. Also, large-scale industry was being established, trusts were being formed, and a belief in the efficacy of competition was waning. The functions of government were increasing. All of these things had their effects upon Patten's thought.

3. Patten's Thought Largely Shaped by His American Economic Environment

In the writer's opinion, Patten's characteristic economic thought took shape before he ever read many, if any, economic treatises. He was not an eclectic economist in any sense of the word. He appears to be the most natural product of his American economic environment, in the form of an economist, that the United States has ever produced. Below are placed in parallel columns the leading characteristics of his American economic environment and the leading characteristics of his economic thought. The causal effect is striking to even the casual reader.

Leading Characteristics of Patten's American Economic Environment	*Leading Characteristics of Patten's Economic Thought*
(1) Change	(1) Dynamic economics
(2) Increasing efficiency in the application of labor	(2) Social law of increasing returns — Surplus Economy
(3) Greater diversity in consumption	(3) Social law of increasing utility — Surplus Economy
(4) Some prospering, others only eking out an existence under apparently similar natural conditions	(4) Emphasis on institutions rather than on nature external to man. Optimism
(5) Diversification of industry and enlarging human opportunities	(5) Advantages of the protective tariff
(6) Establishment of high schools, state universities. Emphasis on general and technical education	(6) Emphasis on productive power
(7) Growth of large-scale industry	(7) Doubt as to the efficacy of competition
(8) Growth in functions of government and an increase in community coöperative activities	(8) Emphasis on coöperation

B. The German Economic Environment

1. Nationalism Stressed

It would appear that the general conditions in Germany when Patten was a student there were such as to contribute to some of the important characteristics of his economic thought.

First, the wars with Austria and France were recent phenomena. German unification had just been accomplished and the spirit of nationalism ran high.

Second, Germany was being rapidly industrialized, and change and optimism were plainly in evidence.

Third, state regulation of and coöperation with business, social legislation, and coöperative activities of various kinds were the order of the day. They probably suggested the inadequacy of individual initiative and competition.

Fourth, the development of productive power, rather than the creation of exchange values, was being greatly stressed, as was indicated by the emphasis on technical education.

These tendencies in German life, with the probable exception of the first one mentioned, gave no new direction to Patten's thought. They merely tended to strengthen ideas which had already been aroused by his American environment. It is altogether probable, however, that the spirit of nationalism, which was even more in evidence in Germany than in America, was largely responsible for the intense nationalism of Patten.

Chapter IV

Consumption and Utility

Patten's most enlightening discussions of consumption are found in *The Consumption of Wealth, The Theory of Dynamic Economics,*[1] and *The Premises of Political Economy.*[2] His discussions of utility are found chiefly in *The Theory of Dynamic Economics,* and in *Cost and Utility.*[3]

A. Strong and Weak Appetites

In his discussion of consumption Patten asserted that there are two types of appetites. One he denominated the strong appetite, the other the weak appetite. "The appetite of a person is strong in whom the point of satiety for some one article is not reached until the stomach is filled." [4] Such a person can make a whole meal of some one or a very few kinds of food. His appetite needs no revival through a change from one to another dish. If any one kind of food is much more easily secured than any other it is very likely to be his staff of life. Such an appetite is more characteristic of primitive than of modern people.

The appetite of a person is weak if the point of satiety for any one article is reached so quickly that several articles must be eaten to supply the needs of the system. A few bites from any dish will dull the appetite of such a person and it is necessary for him to change frequently from one to another dish in order to revive it. He thrives only on a varied diet. This appetite is more characteristic of modern than of primitive society.

[1] Publications of the University of Pennsylvania. *Political Economy and Public Law Series,* Vol. III, No. 2 (Whole No. 11), 1892. Also found in *Essays in Economic Theory,* pages 33-135.

[2] Chapters 2 and 3.

[3] *Annals of the American Academy of Political and Social Science,* Vol. III, No. 4, pp. 409-28.

[4] *Consumption of Wealth,* p. 15.

1. The Survival Value of Strong Appetites Is Limited to Primitive Societies

In primitive societies those people with strong appetites have the best chance to survive.[5] In such societies the supply of food is irregular. Often there are long periods of scarcity. Only those who eat abundantly in the seasons when food is plentiful store up sufficient vitality to survive the periods of scarcity. There is no great variety of food, and it is only those with vigorous appetites not quickly satiated who eat enough to maintain their vitality. At best, the foods are poorly prepared and often they are putrid and afford no temptation to the weak appetite. The survival advantage of those with strong appetites seems very evident in primitive societies.

The strong appetite had other indirect effects which were an aid to racial survival or progress. It served as a powerful motivating force in the lives of primitive people. The pleasure of eating was a bribe which helped them to overcome their indolence. It furnished them an incentive to store up food in times of plenty to tide them over the recurrent periods of scarcity. It encouraged them to domesticate animals, and to till the soil. It helped to develop in them habits of foresight and saving, and a desire to improve the arts of production.

With changes which have gone on in society there have been forces at work which have tended to reduce the advantages held by those with strong appetites.[6] Among these forces are a more regular food supply, a greater variety of food, changed methods of preparing food, methods of procuring food which require less physical exertion, warmer clothing, better shelter, and cheaper fuel.

With these changes those with strong appetites lose the advantage which they formerly had as consumers, but they gain an advantage over those of weaker appetites as producers, according to Patten. Their strong desire for food and drink leads them to work for a low wage. The supply of food is likely to be the limiting factor to their increase in numbers. As producers they tend to drive out of the field of employment those with weaker appetites whose wage must supply them with many things besides food.

[5] *The Consumption of Wealth,* p. 10.
[6] *Ibid.,* p. 11 ff.

Their advantage, however, is only in the field of production. As consumers they are at a disadvantage. They are likely to overindulge in food and drink, and in that way impair their vitality. They are likely to put up with living conditions that are insanitary and morally perverting. Their manner of living tends to blot them out of our cities, and were their numbers not continuously replenished by fresh blood from the country they would disappear much sooner.

Society might try to elevate those with strong appetites into the class with weaker appetites and higher standards of living or it might wait upon the operation of the law of the survival of the fittest. Professor Patten thought that through the operation of one or the other, or both processes, they are destined to disappear. He thought that the former process would accomplish that result more quickly and with less misery than the latter, and he, therefore, favored it.

B. The Influence of the Ratio of Utility to Cost On Variety in Consumption

Patten thought that the fact that any people subsist largely on a single kind of food affords no indication that they crave that food above all others.[7] Instead it merely indicates that one kind of food has a much higher ratio of utility to cost than any other. If there are changes in productive methods or changes in trade which bring two or more products into about the same ratio of utility to cost, the people will increase the number of articles entering into their standard of living.

In a dynamic society such as we have in the United States, there are changes continuously going on which increase the number of articles that have about the same ratio of utility to cost. As a result new articles are continuously brought into our standard of living. Under such conditions does consumption obey only a law of diminishing utility or does it obey also a law of increasing utility?

Upon the answer to this question depends, to a considerable extent, the validity of Patten's claim that we are in a surplus economy rather than in a deficit economy. In other words, if it is shown that, with the changes which take place, the marginal utility of goods

[7] *Ibid.*, p. 17 ff.

increases while the cost of producing goods decreases or remains constant we are in a surplus economy. The question of costs, however, will be postponed to another chapter. In the remainder of this chapter we shall confine ourselves to a discussion of consumption and utility, and undertake to show whether consumption does or does not obey a law of increasing utility.

C. Kinds of Utility

Patten explained that there are three meanings attached to utility. Some things have only an absolute utility. They are essential to mere living, but give the consumer no pleasure aside from the sustaining of his life. Air is an extreme example of this. Other things in addition to having an absolute utility have also a positive utility. That is, they add a sum of satisfaction to life. We are not unconscious that we are consuming them as we are in the case of air, but we are conscious of a pleasure we get from them.

Still other things have a negative utility. There is pain involved in their consumption. Dental services, operations, and many kinds of medicine are examples. They not only afford no pleasure in consumption, but they afford pain or displeasure, even though they are necessary to the preservation of life.[8]

D. The Laws of Consumption

1. Law of Necessity

According to Patten, the first law of consumption is the law of necessity. As he saw it, in a primitive society the greater portion of the productive energy of the people is devoted to getting those things which are needed to sustain life; those things which afford only an absolute utility. Consumption is largely confined to a few articles, and to articles which afford the consumers but little pleasure, even though they have strong appetites. In the opinion of the author this is true among the poorer classes in our present society. It was the writer's lot to attend a rural public school in Kentucky for several years. Many of the children brought lunches to school consisting exclusively of cornbread and fat salt pork, and the writer

[8] "The Theory of Dynamic Economics," *Essays in Economic Theory,* p. 54 ff.

has no memory of ever seeing a child appear to enjoy such a lunch. Certainly their lunches did not afford them much pleasure. It seems that a poor society usually has to make a choice between absolute and positive utilities, and that necessity forces it to choose the former.

2. Law of Variety

With the progress of society a second law of consumption, the law of variety, comes into operation; and with its operation more pleasure is derived from consumption. To illustrate this principle, let us assume that a society subsisting largely upon cornbread and salt pork undergoes such an increase in productive power that it can produce cornbread and salt pork in excess of those quantities which have any absolute utility to it. Two courses are then open. It may increase its production of corn and pork and exchange a portion of them for some other product such as wheat, or it may divert some of its productive power to the production of some other product such as wheat. In either case wheat, a product which has not only an absolute but also a positive utility to the people of that society, will enter into their standard of living. The demands of their bodies now being partially met through the consumption of wheat and their appetites becoming adjusted somewhat to the demands of their bodies, these people will not consume as much cornbread and pork as formerly but will cease consuming them at a point where they have not only an absolute but also a positive utility.

The upshot of it all is that an increase of productive power in a highly dynamic society shows itself in the consumption of a greater variety of products and in an increase in the utility of the final increments of the products consumed. It tends to lift products from the category of those furnishing only absolute utility into the category of those furnishing both an absolute and a positive utility.

It is not only an increase in productive power that brings about a greater variety in consumption, but, as was previously indicated, any changes in the expenses of production which increase the number of articles having about the same ratio of utility to expenses have the same effect. For example, any increase in rent tends to bring about an increase in the variety of foods consumed. As Patten says, "Rent causes a like addition to the cost of every crop, and thus

affects the cheaper foods more than the dearer. If ten days' work will produce the amount of food in potatoes that twenty days' work will in wheat, an increase in rent equal to ten days' work will increase the cost of that quantity of potatoes to twenty days' work, while the cost of the wheat will be increased to thirty days' work. In this way, while the cost of potatoes will be doubled, the price of wheat will be increased by only one-half." [9]

3. Law of Harmony

With an increase in the number of articles entering into the standard of living a third law of consumption, the law of harmony,[10] asserts itself and adds to the utility of the various articles consumed. The satisfaction or utility which we get from consuming a commodity depends, to a very great extent, upon the group of commodities with which it is consumed. The utility of a group of commodities consumed in combination may be much greater than the sum of the utilities of the commodities when consumed separately. In the estimation of many people the utility of a corn pudding is much greater than the sum of the separate utilities of the corn, milk, eggs, and other ingredients entering into the pudding. Professor Patten contends that in a dynamic society, with our increased knowledge of dietetics, we are continually increasing the utility of many products by harmonious combinations. With our improved appreciation of beauty and harmony we select clothing, furniture, and many other products in such a way as to increase their utility.

It may seem that the connection of the law of harmony with the marginal utility of corn, eggs, or any other product which might be suggested is very problematical. Possibly the operation of the law of harmony will bring about such an increase in the demand for the product in question as to cause it to be withdrawn from its marginal use and in that way raise its marginal utility. But Patten failed to note that if a product is produced under conditions of constant expenses the increased demand should have no effect on its price, over the long run, and should bring about no change in the marginal use to which the product is put. If a product is produced

[9] *The Consumption of Wealth,* p. 48.
[10] "The Theory of Dynamic Economics," *Essays in Economic Theory,* p. 56.

under conditions of decreasing expenses the increased demand should cause a fall in its price, in the long run, and thus lower the utility of the marginal increments consumed. It would seem, then, that it is only when a product is produced under conditions of increasing expenses that an increase in demand will tend to raise its price and, thus, raise the marginal utility of the product.

However, it is quite probable that even under conditions of constant or decreasing expenses, the marginal utility of a product will be raised in spite of the fact that the price of the product may be unchanged or lowered. As an example, suppose that a society which has been consuming its meat and its salt separately, rather than in combination, learns to season meat with salt and gets more pleasure from consuming the two in combination than in consuming them separately. As a result the people of this society may eat, in combination, all of the salt and meat which they crave and which their vitality requires. They may no longer eat any of either in their separate and less pleasurable forms, in spite of the fact that there may have been no alterations in prices. All of the absolute utilities which these products afford when consumed separately are now by-products of more pleasurable consumption. Perhaps no one would seriously contend that the marginal increments of our well-seasoned meat give us no more pleasure than would the marginal increments of the meat and seasonings if consumed separately. The fact that we combine them is strong evidence that we do get more pleasure from the combination. It is an indication that consumption obeys a law of increasing utility as products are more harmoniously combined.

Moreover, many products have complementary utilities. The marginal utility of one of these products depends not merely upon the quantity of that product but upon the quantity of other products. For example, the utility of an automobile depends not merely upon the quantity of automobiles but also upon many things among which are the number and character of the highways, the supply of gasoline, and the nature of social habits. The supply of a product is not ordinarily increased in isolation. But it is increased along with an increased supply of other products and as a result the utility of the marginal increments of the whole group may be increased.[11]

[11] *Ibid.*, p. 71.

Just as many articles form a harmonious combination, there are many others which form an inharmonious combination. When consumed in combination their combined utility is less than the sum of their separate utilities. We learn to avoid these inharmonious combinations just as we learn to combine products into harmonious combinations.

4. Law of Costs

We next come to Patten's fourth law of consumption, the law of costs.[12] He asserted that there are two orders in which goods are consumed; the natural order, and the economic order. The natural order is the order in which one would consume if all goods were free. The consumer would first choose that article which would give him the greatest pleasure and as he tended to become satiated with it he would choose other articles for which his appetite is not quite so strong. His consumption would obey the law of diminishing utility.

The other order, the economic order, is the one which prevails in this economic world. When one consumes in the economic order his choices are quite different from what they would be in the natural order. He does not choose articles in the order of the intensity of his desire for them. There is a cost attached to economic goods and the consumer chooses his articles in such an order as to secure, not the greatest pleasure, but the greatest ratio of pleasure to pain or the greatest ratio of utility to disutility.

The significance of this law might be made clear by an illustration. Let us suppose that an increment of goods A will yield the consumer a pleasure of 4 units and has a cost of 2 units of pain, while an increment of goods B will yield him a pleasure of 8 units and has a cost of 6 units of pain, and an increment of goods C will yield him a pleasure of 12 units and has a cost of 10 units of pain. Under such conditions the consumer will not first choose an increment of C even though he evidently desires it much more than he does an increment of B or A. He will not first choose an increment of B even though he evidently desires it much more than an increment of A. On the contrary, he will first choose an increment of A;

[12] "The Effect of the Consumption of Wealth on the Economic Welfare of Society," *Essays in Economic Theory*, p. 2.
"The Theory of Dynamic Economics," *Essays in Economic Theory*, p. 56.

the increment for which he has the least desire and the increment which will afford the least pleasure. He will make this choice because an increment of A affords a greater ratio of pleasure to pain than an increment of either of the other goods. As he consumes A the pleasure or utility which an increment of it yields will gradually decrease, and when the ratio of pleasure to pain furnished by an increment of A falls below that ratio furnished by an increment of B he will start consuming B. Likewise as he consumes B its utility will decrease, and when the ratio of pleasure to pain furnished by an increment of B falls below that furnished by an increment of C he will start consuming C. Under these conditions his consumption is obeying a law of increasing utility. He starts in by consuming a product which affords relatively little utility and then gradually draws into his consumption those products affording more utility.

In the above illustration it may appear that cost is increasing faster than utility as more products are brought into the standard of living, and that as a result the surplus of pleasure over pain is decreasing and that we are moving toward a deficit economy rather than toward a surplus economy, which is the contrary of that which Professor Patten asserts. However, it should be remembered that a time element is involved in this illustration. With the lapse of time the absolute costs may fall all along the line to such an extent that ultimately the cost of producing an increment of B or C is less than the cost of producing an increment of A was at some earlier time. Furthermore, it may be that products A, B, and C form a harmonious combination, with the result that their joint utility is much greater than the sum of their separate utilities.

5. Law of Negative Utility

We now come to Patten's last law of consumption; the law of negative utility.[13] Many articles which give pleasure for the moment, or at least no pain, are a later source of suffering. One eats something which does not agree with him and later suffers from indigestion; he dances and suffers from a cold. As a result he may have to consume distasteful medicines. But with an increase in opportunities to enjoy a greater variety of positive utilities which have no

[13] *Ibid.*, p. 56.

unpleasant consequences, and with increased knowledge, our consumption of negative utilities decreases. Apparently Patten sees a survival of the fittest habits of consumption; the fittest habits being those that are in harmony with our desire to secure pleasure and avoid pain. Society progresses from a simple diet, furnishing little besides absolute and negative utilities, to a varied and harmonious diet furnishing positive utilities.[14]

E. Patten's Contribution to Theory of Consumption

1. Adaptation of Consumption Habits to Economic Environment

Patten probably gave the most illuminating discussion of consumption that is found anywhere in our economic literature. His analysis of the subject indicates that with the progress of a society there is a weeding out of those consumption habits that are out of harmony with the environment; that a process of selection goes on, the result of which is a better adaptation of consumption habits to the environment.

2. Law of Increasing Utility

Patten also presented strong arguments for believing that with the progress of society people have a greater variety of goods to consume and get more rather than less pleasure from their consumption. In contrast with the law of diminishing utility, which plays such an important part in the theory of the Marginal Utilities, he clearly implied that consumption obeys a law of increasing utility.

It appears to the writer that there need be no conflict between these two laws. The law of increasing utility is applicable only in a dynamic society, whereas the law of decreasing utility is applicable only in a static society. The former applies to the utilities yielded by goods in general at different periods of time and under different conditions. On the other hand, the law of diminishing utility has reference to the utilities yielded by specific goods at a specific time under a given set of conditions. It operates in a deficit and not in

[14] Professor Patten set forth another law of consumption; the law of grouping. However, it involves no ideas that have not been considered either in connection with the law of necessity or with the law of harmony. Therefore it seems to require no further consideration.

a surplus economy. In the former consumption is limited to a few staples, but the latter economy possesses an almost infinite number of choices and almost boundless possibilities of substitutions.

Neither the law of diminishing utility nor the law of increasing utility is susceptible to deductive proof, as there is no way to measure the intensity of human pleasures. Both laws are based upon the assumption that man seeks pleasurable and avoids painful experiences. The writer tentatively accepts both laws as valid and the discussion will proceed upon that assumption. Then, if we conclude that the cost of producing goods remains constant or decreases, with the changes which take place in society, we shall accept Patten's conclusion that we are in a surplus economy. To the question of costs we shall give attention in the next chapter.

Chapter V

Cost

Patten's contributions to the subject matter of this and the succeeding chapter are found in *The Theory of Dynamic Economics, Cost and Expense,*[1] *Cost and Utility, The Stability of Prices,*[2] *The Conflict Theory of Distribution,* and *The Theory of Prosperity.*[3]

A. The Meaning of Costs

In his discussions of the costs of production, Patten undertook to show that the costs of production are continuously decreasing in our dynamic society. The task of interpreting him is rendered rather difficult because he did not stick to any one definition of costs. In *Cost and Expense* he said, "Cost is measured by the disagreeable exertion necessary for production. It is the sum of all those painful acts which reduce the vitality of the producer, and hence demand a certain compensation or relaxation to replace the producer in the condition he was before the act of production." [4] In *Cost and Utility* he said, "Cost in a theory of dynamic society means the disagreeable exertion needed to produce commodities." [5] Further on in the same article he said, "Whatever has its source in pain becomes a cost." [6] In *The Theory of Dynamic Economics* he said, "If we estimate the cost of production to society subjectively, it is the sum of pains which producers must endure while engaged in production. If estimated objectively, it is the quantity of goods which must be given to these producers to restore them to the condition they were in when pro-

[1] *Annals,* Vol. III, No. 6, pp. 703-35, 1893.
[2] Publications of The American Economic Association, Vol. III, No. 6, pp. 369-428.
[3] *The Yale Review,* Vol. XVII, pp. 156-84. This is also found in *Essays in Economic Theory.*
[4] *Annals,* Vol. III, No. 6, p. 703.
[5] *Annals,* Vol. III, No. 4, p. 410.
[6] *Ibid.,* p. 412.

duction began." [7] Further on in this article he said, "Cost is the pain of production." [8]

The reader may be left in a quandary, not knowing whether by costs Patten meant merely the pain and fatigue of labor or whether he included all the painful experiences involved in the productive process. Apparently he meant both. That is, he thought that all of the pains involved in production are costs, but at the same time he thought that there are no pains involved except those of disagreeable exertion. He ruled out as elements of costs all opportunity costs, abstinence, rent, and risk bearing. As we proceed to discuss costs, it is hoped that the methods by which he ruled out these elements will become apparent to the reader. It will also be observed that the costs with which Patten was concerned are subjective, and that they are sharply distinguished from objective expenses of production in the form of money outlays.

B. Decreasing Costs and Its Causes

1. Adaptation of Consumption to Environment

As has been indicated, Patten thought that there are not only changes going on in a dynamic society which increase the marginal utility of goods, but also changes which lower the costs of production. This is true in the first place, he asserted, because of changes in consumption.[9] Consumption becomes better adapted to the environment. For example, in those parts of the world where meat can be procured more easily than vegetables, fruits, or grains, people acquire the habits of consuming meat. Evolutionary forces eliminate those who do not like or thrive on meat and the region becomes peopled by those who do like meat and thrive on it. When those changes in environment come about which enable a given amount of labor to procure more meat from domestic animals than from wild animals a taste for the meat of domestic animals is fostered. Patten thought that there is a tendency for the appetites of people to come more and more into harmony with their environment; a tendency for each region to be peopled by those whose wants are met at a lower ratio of cost to utility than was true of their predecessors.

[7] *Essays in Economic Theory*, p. 61.
[8] *Ibid.*, p. 90.
[9] *Ibid.*, p. 62.

2. Division of Labor

Patten also thought that the division of labor and the extension of trade which take place in a dynamic society enable people to get many products at a lower cost than that at which they themselves can produce them. In various ways people learn to coöperate in production; to organize their productive power better, and in so doing to use their labor more effectively and produce at a lower cost.[10]

3. Social Heritage

Then, too, with the progress of society its members become heirs to the accumulated knowledge of production with but little if any cost to themselves.[11] Likewise the acquired habits of industry of the race are theirs, as well as the land which has been cleared of unfriendly animals, stones, and stumps, and which has been drained and irrigated. Racial experience teaches them to harness many of the forces of nature, such as wind, water, steam, and electricity. It teaches them also to apply much of their labor indirectly rather than directly, for the reason that it is more effective and lowers costs. They inherit a tradition of progress, and institutions which encourage it. As a result they continuously devise new machinery and methods, which lighten the burden of labor and enable it to be employed more effectively.

C. Elements Excluded from Costs

1. Non-Economic Pleasures

Patten thought that when the people of a society have advanced so far as to have any non-economic pleasures their productive effort must yield them an excess of pleasure over pain equal to the non-economic pleasures which they could have enjoyed if they had not exerted their economic effort.[12] As an example, if a potential worker can get five units of pleasure out of a festival, a card game, or gossip during a given period of time, he will not produce unless the utility he can derive from his production exceeds the disutility of his labor

[10] *Ibid.*, p. 63.
[11] *Ibid.*, p. 62.
[12] *Ibid.*, p. 66.

by five units. If this excess of utility over disutility were less than five units he could have derived more satisfaction from the festival, the card playing, or gossip, as the case may be, and he would not have worked.

Patten further points out that with the progress of society the enjoyment of the economic goods which people have takes time or leisure. As a result, people will not engage in production unless their productive activity yields them a surplus of marginal utility over marginal costs of production equal to the marginal sacrifice of enjoyment which they undergo in production.

From the above it can be seen that Professor Patten's concept of costs did not include opportunity costs or the sacrifice of leisure and pleasure undergone by labor in production. The various opportunities that may be open to a worker enable him to command a higher reward for his productive effort, but they do not increase the pain which he undergoes in production. They do not increase his cost of production, but instead they necessitate an increase in his compensation for producing. They are the source of an expense of production to those who hire the laborer, and they affect exchange values. But the only cost which labor undergoes is the fatigue and pain of exertion, and this cost is obviously a subjective cost.

2. Interest

We shall next give our attention to interest and try to find out what, if any, elements of cost are involved in interest. Patten asserted that interest is not a cost of production or even a reward for abstinence. The person who saves merely abstains from one form of wealth in order to get another which he regards as more valuable. There is no more pain involved in it than there is when one parts with a horse which has 80 units of utility to him in exchange for a house which has 90 units of utility to him.[13] Using another illustration, suppose one undergoes 5 units of disutility in labor and with the proceeds can buy some vegetable which will give him 6 units of utility, but instead he buys some meat which will give him 7 units of utility. Is it correct in this case to say the meat has cost a total of 11 units of disutility, 5 in the form of labor pain and

[13] *Ibid.*, p. 64.

6 in the form of abstinence from the vegetables? Not at all. There is no pain in going without a thing if as a result one gets something else which he regards more highly.

As Professor Patten sees it, the same principle is involved in saving. One does without a certain quantity of present goods to get a certain quantity of future goods which he regards more highly. He said, "If we look at the act of saving from a social instead of an individual standpoint, it is easy to see that saving decreases the sum of pain and increases the sum of pleasure." This quotation seems to be true; and for that matter, is not all productive effort for the purpose of decreasing pain and increasing pleasure? To the writer it seems that it is. Then, if we can rule saving out because it accomplishes that end we can just as logically rule out all other alleged costs of production, including labor, and conclude that there are no costs of production and that, therefore, all that is produced is a surplus. That is a conclusion, however, which Patten did not draw.

It should be observed that saving is dependent not merely upon abstinence, but also upon production. In order to save, the saver must push his production beyond the point necessary to provide for his present consumption, and this makes his marginal increment of productive effort more painful that it would otherwise be.

In other words, all that is saved must first be produced and, as Professor Patten admitted, production involves cost. Not only that, but at any time one's fund of savings can be used as a substitute for productive effort, that is, one can live out of his capital and refrain from work.

So far as the present demands of consumption go, one's capital and potential labor are interchangeable. The one can be used as a substitute for the other. Then, if, as Professor Patten admitted, labor is painful and is a cost of production, why will a rational man ever resort to the painful process of supplying his present wants through labor when he could live out of his fund of capital, the saving of which involves no pain or costs?

Furthermore, upon what grounds can one account for the limited supply of capital if its accumulation is not painful? Those who have capital can lend it at interest. Interest is not paid for capital merely because it is useful. Air is useful, but nothing is ordinarily paid for its use. Neither would anything be paid for the use of capital if it

were not scarce, nor would it be scarce unless its accumulation involved pain. No answer to the claim that abstinence is painful is to be found in the statement that there is no pain in going without a certain quantity of present goods if as a result one gets a certain quantity of future goods which he regards more highly, unless that certain quantity of future goods is in quantity only equal to or less than the certain quantity of present goods exchanged for it. But we know that a quantity of present goods always exchanges for a larger quantity of future goods, except as modified by price changes. This is equivalent to saying that present goods command a premium over future goods. If abstinence involves no pain, why does not competition among savers push up the value of future goods relative to present goods and wipe out the premium on present goods?

Professor Patten raised the question as to why abstinence requires a reward for its regular exercise, and he attempted to answer it. His answer seems unconvincing to the writer, although the reader may find it otherwise. He said:

> It may, however, be asked why an act of abstinence requires a reward for its regular exercise if it yields a surplus of pleasure. The reason is that the reward would be less than other acts would afford if there were no difference in the value of present and future goods, and hence there would be no motive for the psychical change which the act of saving promotes. For example, in California, during the gold discoveries, why were so many farm products imported? It was not for lack of fertile lands near the mines, because the region has proved itself very productive. It was solely because of the relative return from mines and farms. The laborer could get, say, three dollars a day on the farm and four dollars in the mines. The three dollars would yield him a surplus above his costs, but not so much as the mines would yield. So in the case of saving. The production of future goods would give the producer, with saving instincts well developed, a surplus even without a reward for the act, but this surplus would be less than the surplus the production of present goods would yield if there were no difference in the value of present and future goods. Interest is a factor in distribution, because the reward of labor is more than sufficient to repay the real cost of production, and not because the act of abstinence is necessarily painful. It is therefore not a cost, but a means of equalizing the distribution of the surplus between the producers of present and future goods.[14]

[14] "Cost and Utility," *The Annals,* Vol. III, No. 4, p. 415.

In a few words, his answer seems to be that saving involves only an opportunity cost and that no pain is involved in foregoing opportunities. Nevertheless, we know people who have, to their later regret, neglected their health and the education of their children in order to save. Therefore, it is the opinion of the writer that there are some reasons for believing that saving has often resulted in the degradation of the laborer, in unemployment, and in the neglect of certain unfortunate groups in our society. If so, saving has taken toll in human suffering and pain. It may be true, however, in our modern society that the pain or cost, if any, involved in saving is less than it was in more primitive society. Saving may obey an historical law of decreasing costs.

3. Profits and Rent

Following the lead of Ricardo and General Francis A. Walker, Professor Patten ruled out profits and rents as costs of production.[15] If we accept Patten's idea that the exertion of labor is the only cost of production it seems that profits should be ruled out. If on the other hand we accept the idea that "whatever has its source in pain becomes a cost," [16] we cannot rule out all profits. That will depend on the theory of profits to which one holds. The writer holds that profits are, in part, a payment for risks and that the bearing of risks involves worry, frazzled nerves, and much unpleasant experience. Consequently he holds that profits do involve costs if the latter definition of costs is accepted.

As to rent, the writer holds that a portion of the share distributed as rent involves a cost. Many people have gone to the frontier and cultivated land many years before the annual income from their toil was sufficient to remunerate them for their costs. They anticipated a time when the annual yield from the land would be more than enough to remunerate them for their current effort. Then the land would have a rental value and the rent would amortize the deficit accompanying their earlier years of toil. In other words, rent comes to them as a long awaited remuneration for their effort. If they should

[15] "The Theory of Dynamic Economics," *Essays in Economic Theory,* p. 50, 63.
[16] "Cost and Utility," *Annals,* Vol. III, No. 4, p. 412.

never get any rent much of their labor would result in a deficit. Much rent comes, then, not as a surplus but as a reimbursement for a previous deficit.

D. Patten's Contribution to Cost Theory

1. Distinction Between Costs and Sacrifices

A brief attempt will now be made to evaluate Patten's discussion of cost.

Patten gave the word "cost" two meanings by definition, but by use he limited it to the pains of exertion undergone in production. With him costs were subjective. The distinction which he drew between costs and sacrifices is of no importance to one who is searching for a theory of objective value applicable only to a static society. As we look at the subject of wages in another chapter we shall see that it does have a great bearing on the trend of wages in a dynamic society, and that it offers very interesting suggestions to those who would like to see the wages of labor increased.

2. Law of Increasing Returns

Patten strongly suggested that there is an historical, social law of increasing returns. There is no implication in this, however, that there is not a physical law of decreasing returns applicable to a static society. But it does suggest that the law of decreasing returns is of far less importance than many economic treatises would lead one to believe. If people, generation after generation, learn nothing from experience or otherwise, and continue to apply more and more labor of an identical kind and intelligence along with more and more tools of an identical kind on a given piece of land in an effort to get more and more produce of an identical kind, the law of diminishing returns is of tremendous significance. But under such conditions it is hardly worth incorporating in an economic treatise because, by hypothesis, such people are not going to learn anything and economic treatises as well as all other treatises are entirely useless. If on the other hand, one believes that through a more intelligent application of labor and capital and a better adaptation of our consumption habits to our environment we can and do increase the returns of labor,

we have a social law of increasing returns which is of tremendous significance. Professor Patten believed this. Consequently his outlook was one of great optimism. This law seems to the writer to be of at least as much importance in our dynamic society as the physical law of decreasing returns, and Patten did economic science a great service in suggesting it. It it to be hoped that other economists will give it more consideration in the future than it has received in the past.

Chapter VI

Surplus

With the changes which go on in our society the costs of production decrease. At the same time our appreciation of goods, that is, the subjective value or marginal utility, increases as was indicated in a preceding chapter. The result is the surplus economy with which Patten's name is so closely associated.

A. The Surplus and Progress

The surplus and its increase with the progress of society are illustrated by the diagram in Figure I. This diagram has reference to commodities in general and not to any specific commodity.

In the diagram, time is measured along the line TT' and the cost of producing goods is measured by the distance between TT' and CC'. The line CC' slopes downward because costs of production are believed to decrease with the passage of time. The distance between CC' and SS' measures the sacrifice incurred in producing goods. The line SS' slopes upward because it is presumed that with the passage of time there will be an increased quantity and greater variety of goods to enjoy. Therefore, time taken from consumption and used in production will entail more abstinence from consumption or sacrifice with the passage of time. The distance between TT' and MM', measures the marginal utility of goods at one time and the distance between TT' and LL' measures the marginal utility of goods at a later time. TL is made greater than TM because with the passage of time there is presumably an increase in the marginal utility of goods, due to the greater variety of goods to enjoy, as was indicated in the preceding chapter. When the marginal utility of goods is equal to TM the marginal cost of producing them is equal to BX and the marginal sacrifice of producing them is equal to XM'. The marginal sacrifice is equal to the marginal surplus as was indicated on page 60. Therefore, XM' equals the marginal surplus at

this time. The total cost of producing the goods is equal to the area TCXB, and the total subjective value of the goods is equal to the area TMM'B. The total surplus at this time is therefore equal to the area CMM'X.

At a later time when the marginal utility of goods is equal to TL, the marginal cost of producing them is PY and the marginal sacrifice of producing them is YL'. Since the marginal sacrifice is equal to the marginal surplus, the marginal surplus at this time is equal to YL', which, in accordance with our assumption, is greater than XM'. The total cost of producing the goods in this case is equal to the area TCYP and the total subjective value of the goods is equal to the area TLL'P. The total surplus is now equal to the area CLL'Y,

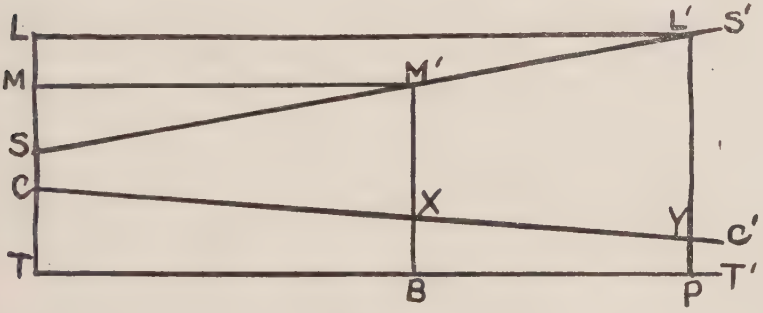

FIG. I

which is larger than the area CMM'X. With further improvements in production the marginal cost of production will continue to decrease and the marginal utility of the goods produced will continue to increase and the surplus will accordingly increase.

B. The Surplus and the Equilibrium Between Supply and Demand

So far as any particular good is concerned, there is always a tendency for its marginal subjective value, or its marginal utility, to equal its marginal cost of production plus the marginal sacrifice involved in its production. The supply of the goods will be increased if its marginal subjective value is greater than the sum of marginal costs and sacrifices involved in its production, and the supply will

be decreased if its marginal subjective value is less than the sum of marginal costs and sacrifices involved in its production. In brief, the equilibrium between supply and demand is not reached when marginal costs equal marginal utility, as the Marginal Utilitists assert, but it is reached when marginal costs plus marginal sacrifices equal marginal utility.

A most fundamental difference between the two theories is that the Marginal Utilitists assume that sacrifices are a part of the costs of production while Patten assumed that they are not. So far as the consumer is concerned it is unimportant which theory is correct in its assumption, because sacrifices have the same effects on objective values and prices as costs have. It is of great moment to the producer, however, whether he is being compensated only for toil, exertion, wear and tear, or is being rewarded also for forfeited pleasure. If I am paid ten dollars for a day's work and the ten dollars is solely a remuneration for my fatigue and toil, it is one thing, but it is a quite different thing if five of the ten dollars is sufficient to reward me for my toil and fatigue and the other five dollars is a reward for staying away from a library, art gallery, or circus.

C. The Surplus, a Producers' Surplus

The surplus of which we have been speaking is not to be confused with the consumers' surplus or rent. It is more properly thought of as their antithesis and it grows at their expense. Patten called it the producers' surplus.[1] High rent and a large consumers' surplus are characteristic of a static society while producers' surplus is characteristic of a dynamic society. As an example, in a static society where there is practically only one food, such as potatoes, for the producers, the marginal utility of potatoes will be very low. Potatoes will yield absolute utility, but scarcely any positive utility. Consequently, the producers will not sacrifice much pleasure in taking time away from consumption in order to produce because they will not have much to consume which gives pleasure. As a result the marginal cost of producing potatoes will approximate their marginal utility. There will be but little producers' surplus. Potatoes

[1] *Ibid.*, p. 81.

will yield a large total utility and a large consumers' surplus just as air does. In this static society the demand for land will be concentrated largely in a demand for potato-growing land and that land will command a high rent. Increased production, if there be increased production, will take the form of an increased quantity of potatoes, the marginal utility of which grows less, and the nearer the marginal utility of potatoes approaches zero the larger will be the consumers' surplus which potatoes yield.

However, let this society become dynamic. Increased production will take the form of new kinds of products. Then the consumers will have many things to consume. They will not push the consumption of any kind of food so far that its marginal positive utility approaches zero. Production will now necessitate the sacrifice of pleasure since the producers will have goods to consume which yield pleasures. Consequently the marginal goods which are produced will have to yield more than enough utility to compensate for costs of production. They will have to yield enough additional utility to compensate the producer for the pleasure which he sacrifices while producing. Thus the producers' surplus appears or increases. At the same time the consumers' surplus will decrease. Consumers will have a greater variety of products to consume and will quit consuming each product while it has a higher positive marginal utility than was true in the static society. If the marginal utility of any good should ever become equal to its initial utility that good would yield no consumers' surplus at all. That is a condition that we can hardly expect, but as the marginal utility approaches the initial utility the consumers' surplus decreases.

As to rents, the demand for land now, since the society has become dynamic, will not be concentrated in a demand for land of one particular quality. Use will be found for a greater variety of land. Land that was formerly considered poor land will now be considered fertile land, perhaps more fertile than much potato land. Due to changes in transportation facilities, land that was formerly inaccessible will be brought into cultivation. As a result, lands of various qualities and widely different locations will be brought into competition with each other and rents will fall, or at least fall relative to the producers' surplus.

D. The Distribution of the Producers' Income

We shall now give our attention to a consideration of the distribution of the producers' income. This income, expressed objectively, falls into two parts. The first part is that which is necessary to restore the producer to the same condition after production that he was in before he produced. This portion remunerates him for his costs. It goes automatically to the individual producer and there is no struggle over it. It is the minimum below which no producer's income will fall for any length of time. Should it fall below this minimum he will quit producing. We might call it the producers' minimum income. The second portion of the producers' income is the surplus. The distribution of this portion is not automatic. Its distribution obeys no rigid law and for an increasing portion of it the owners of the various agents of production wage an incessant struggle. It is to the distribution of this surplus that we shall now give attention.

1. Distribution of the Surplus

In his *Theory of Dynamic Economics* Patten said, "The power of any class of producers to retain or increase its share of this surplus revenue depends upon its ability to control the objective value of its products." [2] The subjective value of the product of a given class of producers may be high, yet if the ratio at which their product exchanges for the products of other producers is low they will get but a small share of the surplus. The struggle for this surplus is not between producers and consumers, but rather between the various classes of producers. Consumers will not share in it for the reason already indicated,[3] and for the further reason that all objective values cannot fall at the same time. That which the consumers as a class gain through the fall of some objective values they lose through the rise of other objective values. Some particular classes of consumers who consume more largely of the products which fall in value than of those things which rise in value may benefit through the fluctuations of objective values, but other consumers will lose. As a whole the consumers' losses will equal the consumers' gains. The competition between the producers which results in fluctuating values does

[2] *Ibid.*, p. 84.
[3] *Ibid.*, p. 74.

not benefit the consumer. Upon its outcome merely depends whether one or another producer or one or another class of producers gets the larger share of the surplus.

The statement that "the power of any class of producers to retain or increase its share of this surplus revenue depends upon its ability to control the objective value of its products" strongly implies that the ability of any class of producers to increase its share of the surplus depends upon the extent to which the class of producers under consideration is in a monopolistic position. The only control a producer can exercise over the value of his product is through his control of supply, and it is only when one is in a monopolistic position that he can control supply.

a. Patten's General Law of Distribution—Its Defects

However, in his stability of prices Professor Patten set forth a general law of distribution containing a slightly different idea. The law is as follows:

> Of the factors necessary for production, that factor which tends to increase at the slowest rate, will reduce the shares of the other factors to their lowest possible limits, will have the benefit of all improvements and must bear all the permanent burdens.[4]

He followed this with an explanation of what he meant by the lowest possible limits. He said:

> The lowest possible limits to which the share of any factor can be reduced is reached when its rate of increase is no greater than that of the most slowly increasing factor. If its share were further reduced this factor would become itself the most slowly increasing factor and its share would tend to increase until its former share was restored to it.[5]

It seems that there is in this a preconception that one particular factor is predestined to be always the most slowly increasing factor, except for very temporary intervals. His context makes it clear that the one factor which he had in mind is land. This seems very strange to the writer after what Professor Patten said in connection with rents, particularly when it is recalled that improvements in the

[4] *The Stability of Prices,* p. 31.
[5] *Ibid.,* p. 39.

agricultural arts and the better adaptation of consumption to natural resources have the same effect on rent as an increase in the supply of land. He seemed to forget the full import of his social causes of rent.

Aside from this, in his discussion of the significance of the rate at which the various factors of production increase, he failed to give any formula for measuring their relative rates of increase. For example, if during a given period of time the amount of land under cultivation increases by ten thousand acres, the number of business enterprisers increases by one thousand, the number of workers increases by one hundred thousand, and the amount of capital increases by twenty-five million dollars, how can one say which is increasing the most rapidly or the most slowly? To what common denominator are we to reduce acres, enterprisers, workers, and dollars to compare them in quantity? About all that we can say is that at any given time these factors exist in some given but unknown proportions, and that if at any later time these factors exist in different proportions objective values will be distributed in different proportions.

But then, what becomes of Professor Patten's dynamic society? Would not changes in consumption habits and changes in the arts of production during the interval, changes designed to utilize these factors in different proportions, be very important factors in influencing the distribution of objective values?

Again, it seems very strange that Professor Patten omitted consideration of these factors in formulating his general law of distribution. He gave attention to them in other connections and clearly implied that they exercise a tremendous influence on distribution. But his statement of the law leaves out of consideration entirely all influence of demand on the relative size of the distributive shares.

Perhaps a more complete analysis of the problem would indicate that the relative size of the shares will depend upon two things. First, upon the nature of the commodities demanded and the relative proportions in which the various factors of production enter into their production. Second, upon the relative quantities of the various factors of production.

The quantities of the various factors of production or the rates at which they increase, is of no importance except in relation to demand. Even if the quantity of one of these factors is decreasing

while all of the other factors are increasing in quantity, its proportion of the distributive shares might fall.

As an illustration, if the quantity of labor should decrease at a time when capital is being substituted for labor very rapidly, so that the demand for labor is decreasing more rapidly than its supply, we might even see a fall in wages. That is, labor's share in the surplus might decrease. It seems that a general law of distribution should indicate that the share going to each factor of production is dependent upon the supply of the various factors of production relative to the demand for them, and that the factor which is the scarcest relative to demand will receive the largest share of the surplus.

Chapter VII

The Stability of Value

Professor Patten's principal discussions of those conditions which cause values to fluctuate are found in his two essays: *The Stability of Prices,*[1] and *The Principles of Rational Taxation.*[2] From the title of the first essay one might think that he was going to discuss those conditions which influence the general level of prices. It is quite evident, however, even to the casual reader of the essay, that what he had in mind was values rather than prices. A much more appropriate title for that essay would have been "The Stability of Values," since in it he undertook to indicate the conditions under which values are stable, and to point out forces operating in our modern society which he thought caused unstable values.

A. Unstable Values as Related to Conditions of Production

Perhaps we can do no better than to quote his own words and then attempt to evaluate the idea behind them.

> The social state in which the Ricardian theory of rent is true, affords the best example of a stability of prices caused by natural conditions. Suppose there be three tracts or grades of land in use upon which the cost of producing wheat is fifty, sixty, and seventy cents a bushel respectively, and that the gross produce of each tract is equal to one-third of the whole. If the price of wheat fell below seventy cents a bushel the third grade of land would go out of cultivation and the amount of wheat produced would fall off one-third. So great a reduction in the quantity produced would cause a reaction in the price of wheat, and it would rise again to seventy cents or more. The price of wheat, however, could not rise much above seventy cents if, as Ricardo supposes, there is a fourth tract of land of considerable extent upon which the cost of cultivation is a little greater than upon the poorest land in use. Under these conditions the price of wheat would be very stable, and would not vary much from seventy cents.

[1] Publications of The American Economic Association, Vol. III, No. 6, pp. 369-428.

[2] Publications of the University of Pennsylvania, *Political Economy and Public Law Series,* No. 6, p. 25.

If, however, we change the conditions of our supposition, the result will be very different. Suppose upon nine-tenths of the land wheat is raised at a cost of production of but fifty cents a bushel, and that on the other tracts of land the cost of production increased gradually from fifty cents to ninety cents a bushel. Under these conditions there would be so small a change in the gross production of wheat, when its price rose, that we could not be certain that the small increase of wheat would counteract the social causes which raised its price. On the other hand, when the price of wheat began to fall, the probability is that the decrease of the supply of wheat would not be large enough to check the fall in price before it reached fifty cents a bushel. Fifty cents a bushel would be the limit below which the price of wheat could not remain for any considerable period of time, since nine-tenths of the wheat has this cost of production. How high the price of wheat might rise could not be determined from the physical conditions alone, and there would be no normal price from which the market price would fluctuate but little. Every change, whether social or physical, would have a great effect on the price of wheat, and as a result the market price would fluctuate rapidly and to a great extent.

If we compare these two widely differing suppositions concerning the physical conditions determining the price of wheat, an important conclusion can be drawn as to the natural causes which make the price of produce stable. If the different grades of land used by an isolated nation can raise about the same amount of produce, then there will be a normal price of produce, and the market price will be very stable. On the other hand, if a nation has so much of some one grade of land that almost the entire crop can be raised on the land of this grade, then there will be no normal price of produce, and the changes in price will be sudden and great. . . . Production of foods does not furnish the only example of the law which I am illustrating. Just as good examples can be obtained from other industries. In one social state all of the producers of a given article of commerce may be so located that there is but little or no difference in the efficiency of their labor, while in another social state the different producers may vary widely as to the efficiency of their labor. During the last century it seldom happened that many producers of any article were at the same place or under the same social or physical conditions. The different centers of trade were small and without ready means of communication, the one with the other. The cost of transportation was great and commerce was insecure, while traveling was perilous. These circumstances, combined with many others which might be mentioned, cause the different portions of each article to have different costs of production, and as the scale of production was everywhere very limited,

no one center of trade could produce enough to supply the market and displace their competitors, who produced at a greater cost of production. In our present social state all this has changed. A slight difference in the cost of production is now usually sufficient entirely to displace the producer who labors at a disadvantage, and the scale of production is so large that the most efficient centers can furnish more than the world needs of any article of trade. Commerce is so secure, and the cost of transportation has been so reduced, that most producers on a large scale can compete with success on any of the world's markets. When these two social states are compared it might be readily perceived that our ancestors were surrounded by natural and social conditions which kept prices stable, while we have lost most of these conditions by agricultural improvements, and by those changes which have brought about a more equal efficiency of labor among producers." [3]

B. Unstable Values and Demand Schedules

It is quite apparent to the writer that Professor Patten sought for the causes of unstable values in the conditions of production. That is rather unexpected, because he generally gave consumption a very prominent place in his economics and also because it seems that demand should be given a place along with supply as a force affecting relative values. In the quotation given above he has, in effect, said that the more elastic the supply of a commodity is, the more stable its value will be. To the writer this seems to be only a half truth. The other half of the truth is, the more elastic the demand for a product is the more stable its value will be. Neither of these half truths is sufficient when standing alone. But the two propositions can be combined into one great truth, which is as follows: The more elastic the supply of and demand for a product is, the more stable its value will be. Conversely, the more inelastic the supply of and demand for a product is, the more unstable its value will be. This might be seen from the following diagrams. The diagram in Fig. II represents conditions of an elastic supply and demand, while the diagram in Fig. III represents conditions of an inelastic supply and demand. In Fig. II the quantity of the product supplied is measured along the line OQ and its value per unit is measured along the line OR. SS represents the supply curve and DD represents the demand curve. Whenever the supply of the product varies within

[3] *The Stability of Prices,* pp. 370-373.

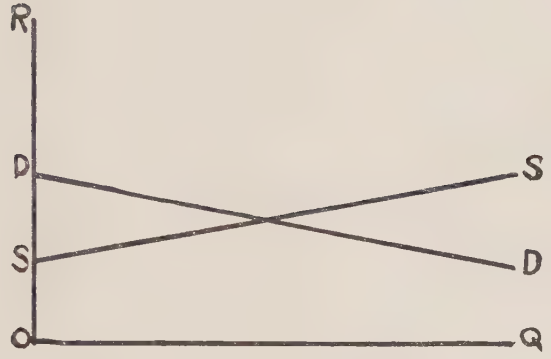

FIG. II

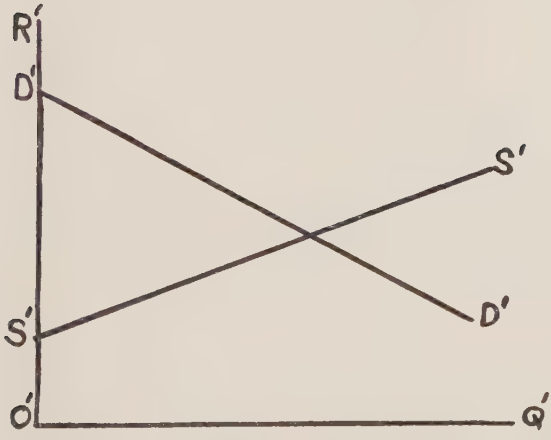

FIG. III

the limits of OQ its value will vary between OS and OD, or in other words, its value will vary within the limits of SD.

In Fig. III, which represents conditions of an inelastic supply and demand, the quantity of the product is measured along the line O'Q', which is of the same length as OQ in Fig. II. The value of the product per unit is measured along the line O'R', while the supply curve is represented by the line S'S' and the demand curve is represented by the line D'D'. Whenever the quantity of this product varies within the limits of O'Q', its value per unit will vary between O'S' and O'D', or in other words, its value will vary within the limits of S'D', which by construction is greater than SD.

C. Forces Tending to Render Supply Inelastic

Professor Patten, proceeding upon the assumption that the stability of the value of a product is dependent only upon the elasticity of the supply of the product, suggested that there are four forces operating in our society which render the supply of products inelastic. These forces are, first, all of those improvements in agriculture which tend to bring about a uniform cost of production for a large portion of the supply of any product. Second, all of those forces in modern society which tend to equalize the efficiency of labor. Third, improvements in transportation and other economic and political conditions which enlarge the productive area supplying the market in question. Fourth, large-scale production. We shall now attempt to examine the effects of these forces, and other forces which it seems would accompany them, on the elasticity of supply and demand, remembering that the more elastic the supply of and demand for a commodity, the more stable its value will be.

1. Uniform Costs of Production

Any tendency toward a uniform cost of producing a large portion of the supply of any agricultural product is the result of the interchange of knowledge of the agricultural arts and the introduction of more variety in consumption which is favorable for the utilization of land in producing those things for which it is best suited. Changes take place in all of these directions at the same time. If wheat is the sole food of the people of the world, wheat will be grown under

a variety of conditions and with a greater variation in costs than it would if it constituted only twenty per cent of the world's food supply. The greater the variety of the food which people consume, the more likelihood there is that the demand for any particular kind of food will be elastic. If people subsist largely upon any one food, such as wheat, any relatively small increase or decrease in the supply of wheat will bring about a relatively great change in its value.

However, if a large part of the food supply of the people consists of rice, rye, corn, many different fruits and vegetables, nuts, meat, and milk, a very large increase or decrease in the supply of any one food such as wheat will have relatively little effect on its value. Under such conditions any tendency for the value of wheat to rise because of a decrease in supply will cause many people to substitute other foods for wheat, and the decrease in the quantity of wheat demanded will check the rise in its value.

The substitution of other foods for wheat will, at the same time, cause an increase in the demand for other foods and cause their values to increase. As a result, the value of wheat relative to the value of other foods will undergo but a slight change. Similarly, an increase in the supply of wheat relative to other foods will bring about a greater effective demand for wheat and a smaller effective demand for other foods. This will have a stabilizing effect on the relative values of all of these foods.

It thus seems to the writer that Professor Patten's position is not correct, because those forces which tend to bring about a uniform cost of producing a large portion of the supply of a product are ordinarily accompanied, or perhaps caused, by forces which tend to make for a greater amount of elasticity in the supply of and demand for the product, and this is conducive to stability of value, as we have indicated.

2. Equalization of the Efficiency of Labor

When we come to examine the second set of forces which Professor Patten suggested are conducive to unstable values, that is, those forces which equalize the efficiency of labor, we find the task very difficult. The difficulty arises primarily because the expression "equal efficiency of labor" is very obscure in meaning. If two workers are engaged in producing the same product under exactly similar

conditions we can measure and compare their efficiency by the quantity and quality of their output. But similar conditions rarely exist, and when they do not exist the task of measuring the efficiency of the laborers is much more difficult.

This might be illustrated by an example. Suppose a laborer working a given number of hours with a capital of a given value on a given piece of land can produce a bale of cotton worth $150, or three hundred bushels of wheat worth $150. Is his labor of equal efficiency in the two employments? Let us further suppose that at some time in the future there is an alteration in the relative values of these products. The same laborer on the same land with the same quantity of capital can now produce one and one-half bales of cotton worth $225, or three hundred bushels of wheat worth $450. Is his labor now of equal efficiency in the two employments?

The writer does not know the answer to either of the questions just raised. The farmer who hires the laborer will undoubtedly say that he has equal efficiency in the two employments in the first instance, but that he has greater efficiency in producing wheat in the second instance. It is also quite likely that if he should ask an economist in which of these employments he could use his labor most efficiently in the second instance, the answer would be in the production of wheat. It seems to the writer that the test of efficiency generally applied to labor in producing unlike products is the value of the products it produces. If that is a valid test of efficiency, then, in effect, Professor Patten's proposition says that as the value of the products of a given quantity of labor becomes more nearly equal in all employments the more unstable values are.

In this connection it is necessary to distinguish between the aggregate values produced by a given quantity of labor and the value per unit of commodity produced by a given quantity of labor. In a thoroughly competitive market the aggregate values produced by a given quantity of labor will tend to be equal in all industries; and if the demand curves for all products are of similar elasticity and the supply curves for all products are of similar elasticity, all unit values will tend to be stable, because nothing will be gained by increasing or decreasing the output in one industry relative to another. And without an alteration in supply there can be no alteration in values, since all demand curves are, by hypothesis, similar.

If the demand curves remain similar the supply curves can remain similar only so long as the physical productivity of labor increases or decreases at the same rate and at the same time in all industries. If the increase or decrease in the physical productivity of labor should be greater in some industries than in others the supply curves would not continue to have similar elasticity. The physical output from a given quantity of labor would increase more rapidly in some industries than in others. The value per unit of the products of those industries experiencing the most rapid increase in output would have to fall, or else the aggregate values of the products of a given quantity of labor in those industries would show an increase relative to the aggregate values produced by the same quantity of labor in other industries.

But if the aggregate values produced by a given quantity of labor in some industries showed an increase relative to the aggregate values produced by the same quantities of labor in other industries, it would indicate that the efficiency of labor in these two groups of industries was showing a tendency to diverge rather than a tendency to seek equality. Equal efficiency of labor could only be secured through a revaluation of products. But to say that products are being revaluated is just another way of saying that the value relations of products are being disturbed, and that values are not stable. If the demand curves for all products are not similar, but are more elastic in the case of those industries experiencing an increased output than in the other industries, the unit values of the products of the industries experiencing an increased output may not decrease a great deal. But if the demand for the products of those industries is relatively inelastic, the unit values of their products may decrease considerably.

We might say that in our society it seems that the test of the relative efficiency of workers in the different industries is the aggregate value of the output of a given quantity of labor during a given period of time, as we have no other quantitative measure of labor. The aggregate value of the output of a given quantity of labor is found by multiplying the number of physical units it produces by their value per unit. Increases or decreases in the physical output of a given quantity of labor during a given period of time do not take place in all industries at the same rate or at the same time. Consequently, the more nearly equal the aggregate values produced by a

given quantity of labor in all industries remain through any very long period of time (that is, the more nearly labor maintains equal efficiency in all industries through any very long period of time) the greater must be the fluctuation in the value per unit of the products of labor.

As an illustration, let us suppose that at one time a given quantity of labor will produce twenty units of X which has a value of $5 per unit, or ten units of Y which has a value of $10 per unit. The unit values of these two products are now to each other as one is to two, and labor has equal efficiency in the two employments, as it produces equal aggregate values in a given time in the two employments. At a later time, however, let us suppose that a given quantity of labor will produce twenty-five units of X or twenty units of Y. If the efficiency of the labor is to remain equal in the two employments the unit values of the two products must now be to each other as four is to five, rather than as one is to two, the relation which existed in the first instance. It thus seems that, as Professor Patten said, the forces in society which tend to equalize the efficiency of labor are conducive to unstable values. One of the most powerful forces, it seems, that tends to equalize the aggregate values of the products of equal quantities of labor is competition. Then it seems that Patten's proposition might be boiled down to the statement that competition tends to bring about unstable values.

3. Enlargement of the Productive Area

The suggestion that improvements in transportation and other economic and political conditions which enlarge the productive area supplying a market tend to unstabilize values is very interesting. Cheap and convenient transportation tends to bring about a uniform price for many products over a wide area at any time. Unfavorable conditions in one part of the world for the production of a product entering into world trade is likely to be neutralized by especially favorable conditions for its production in some other part of the world. As a result, the supply of such a product on any market is not likely to fluctuate as much as it would if the market were dependent on local production. Likewise, a slight increase or decrease in the demand for such a product in any one part of the world is likely to have but little effect upon the price of the product, as it may be

offset by a change in the opposite direction somewhere else. This might be conducive to stability of value.

Yet it should be observed that the price of a product produced over a wide area and entering into world trade is largely determined by world conditions, rather than by the local conditions prevailing in any particular country. But in any country there are many products and services which must be supplied and marketed locally and, of course, under local conditions. Their prices will be determined by local rather than by world conditions. The prices of some products and services in any country engaging in world trade, then, will be determined by local conditions, while the prices of some will be determined by world conditions. When the local price level in any country gets out of line with the world price level, or when local supply or demand forces are much out of line with world supply and demand forces, as they may often be, the prices of products and services entering into world trade and the prices of those entering into only local trade are likely to move in opposite directions, or at different rates if in the same direction. A realignment of values is likely. So it seems that Professor Patten's contention that improvements in transportation and other economic and political conditions which enlarge the productive area supplying a market tend to unstabilize values is of questionable validity. There are, it appears, some circumstances under which it is true, but other circumstances under which it is not true. Any such universal generalization seems impossible.

4. Large-Scale Production

Patten seems to be on debatable ground in his claim that large-scale production is conducive to unstable values. Superficially his claim seems valid, because large-scale production seems to be more prevalent in those industries requiring a large amount of highly specialized capital in proportion to output than in other industries. Large-scale production is likely to be more roundabout production than is small-scale production, and it is likely to necessitate anticipating demand and evaluating market factors further in advance. Consequently, there is more likelihood of error in judgment.

Then, too, when a temporary increase in the demand for the products of the large-scale producer gives them a high value and

yields large profits to the producer it is not easy for new competitors to enter the field. When conditions are the reverse it is not easy for any of the producers to withdraw because of their large amounts of invested capital and heavy overhead costs. Prime costs are usually a smaller proportion of the total costs of large-scale than of small-scale industry, and large-scale enterprisers frequently find it to their advantage to continue to operate, even though they cover but little more than their prime costs. As a consequence, a considerable decrease in the unit value of their product may result in but little, if any, reduction in output, since with every decrease in output the overhead costs per unit of output increase. In brief, the supply curves of large-scale enterprisers are likely to be very inelastic, and as we have seen, an inelastic supply curve is conducive to unstable values.

When the scale of production becomes so large that only a few enterprises dominate an industry, the price of their product is likely to be pegged through concerted action, particularly when the general price level is falling. If so, the price of their product may not follow the downward movement of the general price level. But a product with a stable price at a time when the general price level is falling has an unstable value. If all industries were dominated by a few large enterprises with the will and the power to peg prices, there would, perhaps, be less variation in the general price level and in particular values.

In our economic society, where control in some industries, such as the nickel and aluminum industries, is sufficiently concentrated to peg prices, while in other industries, such as the copper and petroleum industries, concerted action designed to control prices is only intermittently effective, while in still other industries there is no effective concerted control over prices at all, there is a great lack of uniformity in price movements at any particular time. Some prices move along with the general price level, some move faster or slower than the general price level, and some remain relatively stable.

To the writer it seems just a little bit inaccurate to say that these fluctuations in values are caused by large-scale production. The cause seems to be found rather in the variation in the bargaining power of the controlling units than in the size of the productive units. As a result, some prices are fixed under monopoly conditions, some under

semi-monopoly conditions, and some under highly competitive conditions. Consequently, there is no uniformity in the movement of prices. But a lack of uniformity in the movement of prices means unstable values.

D. The Effect of the Surplus on the Stability of Value

Patten also indicated that fluctuations in value are due to the fact that we have surplus economy.[4] They occur because the revenue of society is more than sufficient to keep in activity the necessary factors of production. Were there no surplus all goods produced would exchange for each other in proportion to their costs of production, and the rewards of the producers of each product would just be sufficient to induce them to produce. The value of any product would not deviate from its cost of production, and values would fluctuate only as the cost of producing one product changed relative to the cost of producing some other product.

But in our surplus economy goods do not exchange for each other in proportion to their costs of production. Instead they exchange in proportion to their expenses of production. Expenses are imputed and are subject to great variation owing to changes in the bargaining power of the various classes of producers. Expenses of production are values, hence, values are subject to great fluctuations. For instance, it is possible for the value of a product to fluctuate only between one and two dollars because the cost of producing the product is not much in excess of one dollar. If its cost of production were greatly in excess of one dollar its price would not likely ever approximate one dollar. And if its cost of production were near one dollar its price would never be two dollars if there were not some surplus which the producers of the product were able to control. Thus the fact that there is a surplus affords a range over which values can fluctuate.

1. Utilization of the Surplus

If any scheme could be devised by which the whole of the surplus would be regularly absorbed by any one factor of production values would tend to be more stable. Every other agent of production

[4] *The Principles of Rational Taxation,* pp. 19-20. *The Stability of Prices,* pp. 408-28.

except the one receiving the surplus would then receive a reward just sufficient to induce its aid in production, and the amount of that reward in each case would not show any great variation during comparatively short periods of time. There are forces at work in our society which tend to allocate definitely the surplus to certain uses and thus tend to stabilize values.

a. Waste

One of these forces is the waste of competition, particularly the waste that appears in merchandising. This might be illustrated by considering some hypothetical product X, competitively produced and marketed. Let us suppose that if the retail value of X should fall below $5 its supply would be greatly curtailed, and that if its retail value should rise above $8 its consumption would be greatly curtailed. Conceivably then, the value of the product might fluctuate between $5 and $8. Each retail distributor, in his zeal to make profits, would try to increase his sales; and in so doing he would increase his sales expenses. If the sales of any one of these increased sufficiently, his selling expenses per unit might not increase. But his competitors, finding their sales decreasing, would then increase their sales pressure and selling expenses to win back some of the trade. Then each retailer, on an average, would find his sales no larger but his expenses considerably larger than they were before the competitive struggle entered the stage of intensive sales pressure. As a result, all would again increase their sales pressure and expenses with the same ultimate results as before.

This tendency to increase sales expenses would continue until the retail price of the product was pushed up to approximately $8. The price would not go higher than that because the volume of sales would be seriously curtailed if it did. If the price should ever fall below $8 it would be in a condition of unstable equilibrium and increased advertising appropriations would no doubt soon push it back to near $8. If for any reason its price should long remain below $8 it would simply mean that the consumers would have more to spend for other things, that the point of sales resistance in the case of some other products would be raised and more leeway afforded for wasteful sales pressure somewhere else. Today a great part of our surplus is used to tell our ladies that hats can be found in

millinery stores and to tell our automobilists that gas can be found at gas stations. The absorption of a large portion of our surplus in such a manner tends to limit the range within which values can fluctuate.

b. Monopolies

The waste of competition may be but a transitory phenomenon of our economic system. Our producers and distributors of product X may finally enter into a combination and stabilize its price at about $8, and that which was formerly the waste of the competitive process may become their monopoly profit.

c. Taxes

Patten took the position that if that portion of the surplus which is wasted in competition, or goes into the coffers of monopolies as monopoly profits, were taken as a sales tax it would have a stabilizing effect on values without imposing any burden on the consumer. If a sales tax of $3 per unit were placed on product X referred to above, the price of the product would be stabilized at $8. The $3 cannot be shifted on to the consumer in the form of a higher price because either competitive waste or monopoly profits would have already pushed the price as high as the traffic will bear. Furthermore, it should be recalled that in the preceding chapter it was indicated that the surplus is a producers' surplus; that the consumer as a consumer does not share in the surplus. It follows then that if taxes come out of the surplus they cannot fall on the consumers as consumers. The suggestion that a sales tax cannot be passed on to the consumer comes out of the past with peculiar interest at the present time.

It thus seems that waste, monopoly profits, and sales taxes all tend to stabilize values.

Chapter VIII

Rent

Professor Patten's chief contributions to the discussion of rent are found in *The Premises of Political Economy,*[1] the *Interpretation of Ricardi,*[2] *The Consumption of Wealth,*[3] and *Malthus and Ricardo,*[4] and *The Stability of Prices.*[5]

A. Preceding Theories of Rent

The two important preceding theories of rent with which Patten was familiar, and which influenced his thinking on the subject, were the rent theory of Malthus and that of Ricardo. The theories of Malthus and Ricardo were similar in that each utilized the Malthusian theory of population. But their theories of rent were based on other fundamentally different premises which led to very different conclusions.

1. Thomas Malthus

Malthus had as a background in his thinking an old established society in which all the land was in cultivation, but cultivated with little skill, intelligence, and capital. Under such circumstances there was but little if any rent or profits. It took about all that the laborer could produce to support him. Whatever rent there was, was largely due to the fertility of the soil, that is, it was due to the fact that the land yielded more of produce than was necessary to support the laborer engaged in cultivating it. If there were any difference in the fertility of land, rent would vary with that fertility, as Ricardo indicated. But rent was not due to the niggardliness of nature, as Ricardo suggested. Instead it was due to the bounty of nature.

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[1] Chapters 1, 2, 3, 4.
[2] *Quarterly Journal of Economics,* Vol. VII, pp. 322-353, April, 1893.
[3] Publications of the University of Pennsylvania, *Political Economy and Public Law Series,* No. 4.
[4] Publication of American Economic Association, Series I, Vol. IV, pp. 9-34.
[5] *Ibid.,* Vol. III, No. 6, pp. 5-64.

With every increase in intelligence and skill used in cultivating the land, rent arose or increased, since the tendency to over-populate kept wages at the subsistence level. Rent was thus largely the result of social causes, and any increase in rent was an indicator of progress. Rent was a real gain to society, a measure of progress in the arts, and not a mere transference of revenue.[6]

To illustrate. If at a given state of the arts the labor in a country produces 1,000,000 units of food, and 1,000,000 units of food are required to support the labor engaged in producing it, there will be no rent. But if at another stage of the arts the labor in the country produces 2,000,000 units of food, and only 1,500,000 are required to support it, there is rent. Perhaps not a rent of 500,000 units, because the capital used in cultivating the land may absorb some of it. But whatever of rent there is, under the assumed conditions, is not a deduction from wages or profits. Labor got only a subsistence wage before the improvements in the arts and it gets no less after the improvement. Before the improvement in the arts there could have been but little, if any, profits, since it took the whole of the produce of the land to support the labor engaged in cultivating it. Consequently, we cannot say that rent represents a deduction from profits. In short, rent has come out of the increased output and not as a deduction from a share that formerly went somewhere else.[7]

In this theory there is a strong implication that a rise in rent is not dependent on a rise in the price of food, as Ricardo assumed. Instead a rising trend in rents might be accompanied by a falling trend in the price of food. For example, let us suppose that at a given time a laborer is producing 200 units of food anually on the marginal land of quality X. At a later time with the progress of the arts this laborer may be able to produce annually 300 units on the given tract of land of quality X, and 200 units on land of the quality Y, which is now the marginal land. Under such conditions rent will be paid for the land of quality X; and all land of a better quality, upon which the improvements in the arts of agriculture can be utilized, will undergo a rise in rent. If during this period of time the progress in the agricultural arts has been more

[6] *Inquiry Into the Nature and Progress of Rent.*
[7] This interpretation of Malthus is expressed in *Malthus and Ricardo.*

rapid than the progress in most other arts there may be such a revaluation of goods that the price of food, or the value of food in terms of other goods, will actually fall.

2. David Ricardo

Ricardo had as a background to his thinking on the subject of rent a new colony which was being settled by a highly civilized people. Presumably, these people used the best of the land first, and so long as it was so abundant that every one could have it by taking possession of it there was no rent. With the increase of population all of the best land was occupied sooner or later and then the continued increase of population forced the people to use land of less fertility. Due to perfect competition, wages were the same for the labor utilized on all the land regardless of its degree of fertility, and likewise profits were uniform. The yield on the poorest land in cultivation was only enough to pay the prevalent wages and profits. The better land, however, yielded a return in excess of this, a surplus collected by the landlords as rent.

The rent of any piece of land was thus equal to the difference between the produce of a given quantity of labor and capital on that land and on the poorest land in cultivation. These differences in the quantities of produce were caused, it was thought, by differences in the fertility of land. As a consequence rent was caused by differences in the fertility of land, or by the niggardliness of nature, as was sometimes said. Here we have the cause of rent, found in nature, external to man, rather than in society, as Malthus thought.

Furthermore, rent was only a transference of revenue from the capitalists to the landlords. Wages remained fixed near the subsistence level, and the difference between what the laborers produced and what they received as wages was distributed as rent or profits. If a larger share of it was distributed as rent because of the necessity of cultivating poorer land there was obviously a smaller share to distribute as profits, or if more went for profits there was less for rent. Rent, then, was not an addition to the revenue of the nation but a deduction from profits.[8]

[8] This interpretation of Ricardo is presented in *Malthus and Ricardo*.

B. Patten's Attitude Toward the Theories of Malthus and Ricardo

1. Malthusian Theory

Professor Patten accepted some of the conclusions and implications of both the Malthusian and the Ricardian theories of rent. He accepted the Malthusian theory that the causes of rent lay more in society than in nature; that is, in social rather than in physical causes. He did not agree, however, that progress is a cause of rent. Instead, he thought that it is through progress that rent is to be held in check or decreased, as we shall see later.

2. Ricardian Theory

Patten accepted the Ricardian idea that society enjoys a surplus from better lands over and above the cost of production. But he did not agree that all of this surplus goes to the landlords and capitalists.

Perhaps most of Patten's significant objections to the Ricardian theory of rent can be summed up in the statement that Ricardo failed to give adequate consideration to the social causes affecting rent; that he over-emphasized the part that nature plays in rent and under-emphasized the part that society plays in rent. However, Patten makes his objections more specific and to these objections we shall now give consideration.

a. The Order in Which Lands Are Brought Into Cultivation

First, Patten objected to the Ricardian theory of rent on the ground that it assumes that the most fertile lands are the first to be brought into cultivation and that every extension of cultivation is to poorer lands and results in dearer food and higher rents.[9] Patten thought that there is no land which has been brought into cultivation without first removing some obstacle which nature has imposed to its cultivation. All land, before it can be cultivated, requires either draining, the removal of trees, the removal of stones, or the removal of insects or animals which might endanger the crops or the lives of the occupants of the land.

[9] *Premises of Political Economy,* p. 40.

As a consequence, man first cultivates that land which is not necessarily the most fertile, but which offers the most easily surmounted obstacles to cultivation. With changes in the arts and sciences the relative significance of the various obstacles varies. Perhaps a century ago the stony hillside offered less serious obstacles to cultivation than the low valley infested with malarial mosquitoes. But maybe today the mosquitoes can be removed from the low land at a much lower cost than that incurred in removing the stones from the hillside a century ago. If so, the extension of cultivation, when the low land is brought into cultivation, will be from less fertile to more fertile land, and it will not result in dearer foods and higher rents. It might have the opposite effect if the progress of society is sufficiently rapid.

The distribution of population will also have a great deal to do with the order in which land is brought into cultivation.[10] The fact that New England, New York, and other sections which might be mentioned were brought into cultivation before Illinois and Iowa is explainable on that hypothesis and perhaps on no other. Frequently, the development of transportation facilities leads to a progression from the less fertile to the more fertile lands, from dear food to cheap food, and from higher to lower rents.[11]

Interest rates relative to wage rates may also have a great effect on the order in which land is brought into cultivation.[12] With high interest rates and cheap labor it might be more profitable to utilize much labor and little capital on light poor soils, while with lower interest rates and dearer labor it might be more profitable to cultivate the heavier and more fertile soils.

All of this strongly indicates that it is not the fertility of soil, in any absolute sense, which determines the order in which land is cultivated; that the extension of cultivation is not necessarily from the more to the less fertile land; and that extension of cultivation does not necessarily result in dearer food and higher rent. It suggests that social causes are of great importance, perhaps dominant importance, in determining the order in which land is brought into cultivation.

[10] *Ibid.*, p. 28.
[11] *Ibid.*, p. 29.
[12] *Ibid.*, p. 28.

The followers of Ricardo may interpose that he had in mind a given state of the arts, and that he meant that at any time the land which imposes the fewest obstacles in proportion to return is the most fertile and is that which will be first brought into cultivation. Perhaps he did have that in mind. But if so, he and his followers erred in jumping to the conclusion, that with the increase of population and the passage of time, the proportion of the produce which will go to the landlords as rent will necessarily increase. Because with the passing of time there are changes in the state of arts; and the probable effects of these changes upon the order in which land is brought into cultivation, and upon rents, should have been considered by any one who was attempting to formulate a theory purporting to show the future trend of rents and profits. In brief, he erred in drawing conclusions applicable to a dynamic society which were based upon a law valid only in a static society. About the most charitable thing that can be said is, that at the time he wrote, progress in agriculture was relatively slow; perhaps not rapid enough to be considered an important modifying factor.

b. The Fertility of Land

In the second place, Patten objected to the Ricardian theory of rent on the ground that it assumes that lands remain in the same ratio of fertility as that in which they are regarded when they are first brought into cultivation.[13] There is in this a supposition that lands can be classified and arranged in order according to their absolute and permanent ratios of fertility. Patten, on the contrary, assumed that whether or not we consider land fertile or poor depends on its suitability for the uses to which we would like to put it. Land might be fertile in the eyes of those who want a potato diet but poor in the eyes of those who want a rice diet, or it might be fertile in the eyes of those who want meat but poor in the eyes of those who want wheat. It might be fertile in the eyes of those who want woolen clothing but poor in the eyes of those who want cotton.

In a dynamic society the fertility of soils changes both relatively and absolutely, not merely or most significantly because of changes in climate or changes in the composition or structure of soils, but

[13] *Ibid.*, p. 31.

because of changes in the intelligence and industry of people. No soil is fertile unless there are people who think it is fertile. There are no resources for those who do not know how to utilize them or for those who through indolence or superstition are prevented from utilizing them. We are told of an ancient people who eschewed striped cattle. To them such cattle were no resource. Perhaps the American Indian regarded the fish-infested everglades or the game-laden Appalachian Highlands as far more fertile than the Illinois prairies, while today the majority of Americans might think otherwise. To Patten it seems that fertility was not an objective quality or condition of land. The term implied a subjective-objective relationship; a recognition of some use to which the land might be put.[14] Whether or not land is fertile then depends very largely on the consumption habits of the people and on their arts of production and transportation. In short, it depends on social conditions.

Furthermore, as Patten pointed out, the ratios of the fertility of lands for any particular use vary with the treatment given the lands. A proper rotation of crops or a cover crop on the hillsides during the fall and winter, such as rye, which keeps them from eroding, may preserve the fertility of land in one section; while different habits of industry or different degrees of foresight and intelligence may let the lands of some other section, which has more original fertility, become almost or entirely devoid of fertility.[15] Since the fertility of land appears to have social as well as physical causes the ratios of the fertility of land will be subject to continuous change in a highly dynamic society. To these social causes affecting the fertility of land Ricardo gave inadequate consideration.

c. Cost of Food

The third objection which Patten found to the Ricardian theory of rent was its claim that the price of the whole food supply is determined by the cost of that portion produced at the greatest expense.[16] In this claim there is a failure to distinguish between two important elements of expense, that necessary to bring land into cultivation and that necessary to keep it in cultivation.

[14] *Ibid.*, pp. 46-49.
[15] *Ibid.*, p. 27.
[16] *Ibid.*, p. 31.

It ordinarily requires labor or expense to bring land into a state of cultivation. It may have to be drained or cleared of stumps and stones. In Patten's own words we might say:

> When lands have been once cleared of timber and brought into a proper state for cultivation the work is done once for all, and the capital and labor so expanded become intermingled with the natural qualities of the soil. The revenue which the owner receives for such expenditure is properly to be regarded as rent, for it is governed by the laws of rent. Whether or not return can be obtained from capital thus expended must depend on the causes which determine rent, and not on those which determine interest; and the fact that no return is obtained for money once expended has no tendency to reduce the amount of production.[17]

By way of illustration let us assume that to bring a piece of land into a state in which it can be cultivated as corn land requires an expenditure of $4,000, that to keep it in condition to cultivate requires an annual expenditure of $1,000, and that to cultivate it requires the annual labor of one man who is paid $480. If the interest rate is eight per cent this piece of land will have to yield $1,800 annually in order to be brought into cultivation. Of this amount $320 will be required to pay the interest on the capital expended in bringing the land into cultivation, $1,000 will be required to replace the capital used each year to keep the land in a state of cultivation, and $480 will be required to pay the laborer who cultivates the land. If it is anticipated that the average annual yield of corn will be 1,800 bushels this land will be brought into cultivation when it is expected that the price of corn one year with another will average about $1.00 per bushel. But after the land is once brought into cultivation it will not go out of cultivation unless the price of corn falls below 82.22 cents per bushel, as that price will cover the annual expenditure involved in keeping the land in a condition to cultivate and the wages of the laborer employed in cultivating it.

Presumably, it is understood that for the land to remain in cultivation there is no necessity that it yield any interest or return on the original expenditure made in bringing it into a state suitable for cultivation. That is a sunken cost and will not be price-deter-

[17] *Ibid.*, pp. 33-34.

mining after the land is once brought into cultivation. From the foregoing it is, perhaps, evident that the price of corn will have to go to $1.00 per bushel or more before any additional land is brought into cultivation, and that it will have to fall below 82.22 cents per bushel before any of the marginal land goes out of cultivation. It follows then that at any price between 82.22 cents and $1.00 per bushel corn will be selling below the expenses incurred in producing that portion of the supply produced at greatest expense. Thus the correspondence between the marginal cost of producing the food supply and its price, which Ricardo affirmed, does not exist.

Professor Patten thought that the margin between the price which will remunerate those who bring new land into cultivation and that which will cause land to be withdrawn from cultivation is larger in old than in new countries. This is another way of saying that in old countries the price of food is likely to fall further below the marginal cost of producing it than in new countries. This seems to be true because in new countries there is, at any time, uncultivated land offering fewer obstacles to cultivation than in older countries where there has been a more complete utilization of possibilities. As a result the sunken costs—that is, the costs which are not price-determining after the land is brought into cultivation—in the marginal land under cultivation in old countries are a larger proportion of the total expenses of raising the crop than in new countries.

It is also true, as Patten said, that as any country grows older the margin between the price which will remunerate those who bring land into cultivation and that which causes land to be withdrawn from cultivation grows larger.[18] This is so because with the progress of the arts the cost of cultivating land, that is, the price-determining cost, decreases, while the sunken cost which has no influence on price remains fixed.

C. Patten's Theory of Rent

After Patten turned aside from his criticism of the Ricardian theory of rent his discussion of rent was primarily devoted to a consideration of human traits and social customs and institutions which affect the desirability of land and the quantity of fertile land relative to man's wants.

[18] *Ibid.*, p. 36.

1. Adaptation of Consumption to Environment

It appeared to Patten that the scarcity or abundance of fertile land, as the case may be, is to a considerable extent determined by consumption. If people insist on consuming, in relatively large quantities, only those things for the production of which but little land is suitable only that land will be considered fertile and it alone will command a high rent. If all the people of the world should form a dislike for all meats, vegetables, fruits, nuts, and grains, except corn, that small portion of the world where the soil and climate are suitable for the production of corn would command a very high rent, and much land which is now planted in rice, wheat, potatoes, and other things would become worthless. Under such circumstances the cause of the high price of food and the high rent would lie in society rather than in nature. On the other hand, if people should further vary their diet so as to utilize a greater variety of soils and climate, or so as to utilize more intensively those now used, a given population would at any time press less severely upon its food resources. As a result food would be cheaper and rent lower.

In any large country, such as the United States, there is a great variety of soils and climates. Some parts are more suitable for one crop and other parts for other crops. The maximum food supply will be grown in such a country when the demands for the various crops are in the same proportions to each other as are the quantities of land best fitted for the production of the various crops. Under such conditions the differences in the fertility of the land will be at a minimum.[19]

In connection with this, however, the effects of the rotation of crops on land should be kept in mind. Land highly suitable for any particular crop sooner or later tires of that crop if it is continuously grown on the land. So to speak, the land loses its fertility. Consequently, it is necessary to let much land lie fallow a large portion of the time or else rotate the crops planted on it. Rotation of crops on land that was previously fallow a large portion of the time has the same effect as an increase in the quantity of fertile land. It results in cheaper foods and lower rents. Rotation of crops is practical, though, only when consumption is varied in such a way

[19] *Ibid.*, p. 49.

as to demand the crops grown in the rotation. Consumption is most effective in bringing about cheap food and low rents only when the demands for the various crops which might be grown in the rotation are so proportioned to each other as to induce that rotation which is most effective in preserving or increasing the fertility of the soil over a long period of time.[20]

2. Economy in Consumption

Economy in consumption involves not alone a consideration of the qualities of the soil and climate. It also involves the utilization of that which is produced. There is much waste in our consumption, waste which results in dearer food and higher rents. One of the sources of waste is in what Professor Patten called "exclusive consumption." [21] This takes many forms among which might be mentioned large private estates. These, in the aggregate, withdraw considerable quantities of land from cultivation largely for the exclusive enjoyment of their owners. Instead of this we might have public gardens and parks utilizing much less land but affording far more community enjoyment. He intimated that as people become more socialized in their views and attitudes it is not necessary for them privately to own parks, libraries, and museums in order to enjoy them highly. He anticipated an increase in collective consumption with its consequent economy of land.

Then, too, Patten thought that there is a great deal of waste in the preparation of food, waste in converting grains into alcoholic beverages and liquors; waste in the preparation of many foods in the home rather than in the bakery, cannery, or creamery. With improvements in the culinary arts, he suggested, the time would come when many products, then hardly considered human food, would be made into palatable dishes.[22] He also thought that a great many people eat more food than is necessary or advisable. At one time people had to eat not only to furnish energy but also to furnish bodily heat. The supply of food was irregular in our primitive days. Those who had strong appetites, and ate enough in times of plenty to store up sufficient vitality to carry them through

[20] *Ibid.*, pp. 160-61.
[21] *Ibid.*, pp. 52-54.
[22] *The Consumption of Wealth*, p. 22.

a starvation time, had the best chance to survive.[23] All this is changed now. We have better clothing and shelter; our occupations require less physical exertion; and our supply of food is more regular. Our appetites, however, have not yet become fully adjusted to these changed conditions. As we become better adjusted we shall require less food per capita, and this will serve as an offsetting tendency to forces that may make for higher rents.

3. Improvements in the Arts of Agriculture

With the progress of society a similar effect on rent is also accomplished through a greater use of skill, intelligence, and capital in the cultivation of land. Capital assumes different and more productive forms. Crude tools give way to machines. For man power is substituted horse power, steam power, or electric power. Seeds are more carefully selected. Soils are thoroughly analyzed and better prepared for the crops. Fertilizers are more intelligently selected. The breeds of livestock are improved. A larger fund of racial experience is utilized. In spite of the static law of diminishing returns at any given time, the output per worker increases over a period of time, and a social law of increasing returns is operative. Diminishing returns from land is a physical law, but increasing returns, in Patten's interpretation, is an historical law.

D. Patten's Contribution to Rent Theory

1. Subjective-Objective Aspect of Fertility

One of the great contributions of Patten to rent theory is the idea that fertility is only a subjective-objective relationship between man and land. It is as much dependent upon man's consumptive habits and knowledge of the qualities of the soil as upon any inherent qualities of the soil itself. As a result, a classification of the lands, in use at any time, on the basis of their fertility throws no light on the order in which the lands were brought into cultivation. Likewise the idea, that as man extends his cultivation of land he passes from the more fertile to the less fertile land, can have no general application in a dynamic society. On the contrary, the marginal land of

[23] *Ibid.*, pp. 9-14.

today may be considered more fertile in ten years from now than much land that has been in cultivation for decades or centuries. The extension of cultivation therefore affords no reason for thinking that it will necessarily be accompanied by rising rents.

2. The Social Law of Increasing Returns

Patten thought that there are social forces at work tending toward a better adaptation of man to his environment, a more economical consumption of our food, and a more efficient utilization of our land; forces which inevitably affect the trend of rents. In his discussion of rent we are introduced to a social or historical law of increasing returns which stands in sharp contrast to the physical law of diminishing returns, which is one of the pillars of the Ricardian theory of rent. The social law of increasing returns is probably Patten's greatest contribution to rent theory. The contrast is fairer and even more striking when compaeed with Ricardo's historical law of rent as a transition from richer to poorer lands.

3. Optimism

Patten's views on rent offer a far greater basis for optimism than did those of Ricardo. Man's intelligence and industry rather than nature's niggardliness become the limiting factors on the world's food supply and the controlling factors in the rate of rents. Patten believed that intelligence and industry can be improved or better utilized. With him economics ceased to be a dismal science. His ideas suggest the great possibilities inherent in a careful survey of our food-producing resources and a conscious effort to shape our consumption habits so as better to utilize those resources. In this he was probably the prophet of a new science.

E. The Reconstruction of Rent Theory

In the writer's opinion Patten's ideas about rent are not in contradiction to the Ricardian theory when the latter is understood as a theory applicable only to a static society. Patten indicates, however, that the Ricardian theory furnishes a very incomplete, if not erroneous, explanation of the behavior of rent in a dynamic society;

so incomplete that it is often misleading to the student, so incomplete that it has given rise to fallacious theories concerning the relation of rent, profits, and wages to each other.

It thus seems that economic science is in need of a new theory of rent. It also seems that any theory of rent applicable to a dynamic society must have as a foundation the subjective-objective idea of fertility, and its superstructure must be erected by a careful balancing and comparison of the two laws; that is, the physical law of diminishing returns and the social law of increasing returns. Patten has contributed more than any one else toward the development of such a theory. But the task remains unfinished.

Chapter IX

1. Wages [1]

A. Labor Shares in the Surplus

As we have seen, Patten contended that labor is the only cost of production. Like the Classicists, he thought of wages in terms of food. He asserted that the real measure of a worker's wage is the amount of food for which his labor will exchange.[2] He made no claim, however, that wages are at the subsistence level or that they tend toward the subsistence level, as did many of his predecessors. As he saw it, they cannot fall below the subsistence level because if they did production would cease. But he thought that in our present society labor gets more than that; it shares in the producers' surplus.

B. Each Distributive Share Is Determined by Definite Conditions

In distribution Patten saw no residual share, as did John Stuart Mill, General Francis A. Walker, and others.[3] Instead, each share is fixed by definite conditions. One share is not large because another is small; neither is one share small because another is large. If rent is high it is due to our estimates of the difference in the fertility of land. To know what a given piece of land will rent for, it is only necessary to compare our estimate of its fertility with our estimate of the fertility of the marginal land. It is not at all necessary to know whether profits, interest, or wages are high or low. It is only changes in our estimates of the fertility of land that affects rents.

[1] Professor Patten's most important contributions to the subject matter of this chapter are found in:
President Walker's "Theory of Distribution," *Quarterly Journal of Economics,* October, 1889, Vol. IV, pp. 34-49.
The Economic Basis of Protection, Chapters 6 and 8.
"Cost and Expense," *Annals,* Vol. III, No. 6, pp. 703-35.
The Premises of Political Economy, Chapters 2, 4, and 5.
[2] *The Premises of Political Economy,* p. 51.
[3] President Walker's "Theory of Distribution."

Changes in wages, profits, or interest will have no influence on rents except as they may affect our standards of living or methods of production, and indirectly affect our estimates of the fertility of land.

Likewise, profits are due to the difference in the abilities of business enterprisers and risks. Even if all risks should be eliminated from business and all business men brought to one level of ability, so that profits entirely disappeared, there is no necessary reason why rents, interest, or wages should rise.

If people had no preference for present over future goods there would be no interest. If one knows the amount of resistance overcome to get the marginal savings he can know the interest rate without knowing anything at all about the amounts of the other distributive shares. Similarly there are definite conditions which determine how much if any of the producers' surplus will go to the laborers as wages, and it is our purpose to examine those conditions noted by Professor Patten as of importance in determining labor's share of the surplus.

C. Conditions Which Affect Wages

1. New Opportunities for Employment: The Extensive and Intensive Margins of Production

Among the conditions which affect wages we might mention first the rate at which new opportunities for employment are opened up.[4] Additional quantities of labor can be applied at either the intensive or the extensive margin of production. For instance, a manufacturer of handkerchiefs might enlarge his facilities for producing handkerchiefs. Should many manufacturers do that, the marginal utility of handkerchiefs would likely decline sooner or later. If so, the additional laborers used in making handkerchiefs would be working at the intensive margin of production making a product of diminishing utility. Conceivably the production of handkerchiefs might be pushed so far that their costs and value would approximate each other. Under such a condition there would be no surplus to distribute, and wages could not be more than sufficient to compensate the laborers for their cost.

[4] "The Theory of Dynamic Economics," *Essays in Economic Theory*, p. 101 ff.

But instead of applying more labor at the intensive margin of production, the handkerchief manufacturers might expand their facilities in some other direction. They might start making flags, masquerade suits, purses, and various other things of higher marginal utility, and in so doing utilize additional labor at the extensive margin of production. Under such conditions, value and costs would not approximate each other and there would be a surplus to distribute.

It does not follow that all of the surplus created by making new products of higher marginal utility will be monopolized by any one factor of production. The marginal productivity of labor will be raised and a portion of the surplus will be distributed as wages. The business enterprisers will have more avenues in which to exert their energies, and the intensity of their competition will be less in each avenue.

Consequently the general rate of profits may rise coincident with a rise in wages. Not only that, but the use of cotton in making the new products may raise the marginal utility of cotton and the rent of cotton-growing lands. The increased demand for cotton-growing lands may cause a transfer of land from other uses to that of cotton growing and bring about a general rise in rents. At the same time the increased profits of the business enterprisers may bring about an increased demand for capital, and thus interest rates may rise. It seems to follow, then, that the wage earner, the business enterpriser, the landlord, and the capitalist may all find their incomes increased through the introduction of new industries. It also seems apparent that an increase in the income of one of these factors of production is not dependent upon a decrease in the income of some other factor.

2. Labor's Preference for Present Goods as Compared with Future Goods

Among other conditions which affect wages we might mention next the preference which laborers have for present goods over future goods.[5] A large portion of our labor is used to produce future goods rather than present goods. That is, a large portion of our labor does not yield goods ready for immediate consumption, but contributes only to a supply of goods for consumption in the future. If all the

[5] President Walker's "Theory of Distribution."

factors sharing in distribution were just as willing to take future goods as present goods there would be no interest. But they prefer present goods, so a share of the future goods is distributed as interest. Labor in particular prefers present goods to future goods, and as a consequence it discounts the future value of the major portion of its product. Wages are estimated in present goods. The rate at which labor discounts the future value of future goods depends upon its preference for present goods over future goods, and upon its effectiveness in producing present goods relative to its effectiveness in producing future goods. If labor were just as effective in producing present goods as in producing future goods it would either produce no future goods or else it would get the full future value of those future goods estimated in present goods.

a. The Lag in the Increased Output of Present Goods

A large portion of the increase in the effectiveness of labor comes through more roundabout production, through the use of more capital or through its use during a longer period, and as a result there is a considerable lag between the time when the more effective methods are initiated and the time when an increased quantity of goods ready for immediate consumption materializes. Consequently, whatever increase in wages takes place does not keep pace with the increased effectiveness in the application of labor.

As an example, suppose that in a given state in the efficiency of labor twenty men can produce a locomotive in one year. At a later time suppose that their efficiency has improved so much that the twenty men can produce two locomotives in one year. If in each case the workmen accept a portion of their product as wages, each workman will receive one-twentieth of a locomotive in the first case and one-tenth of a locomotive in the second case. But if each workman trades his share of the locomotive for present goods and there is no increased quantity of present goods, each workman will get no more present goods in the second case than in the first. Or if there has been a smaller increase in the efficiency of labor in producing present goods than in producing future goods, that labor engaged in producing future goods will not reap the full measure of its efficiency, in the form of present goods. Because of the lag between an increase in the efficiency of labor and an increase in the quantity of goods

ready for immediate consumption, laborers can share to the fullest extent in their increased effectiveness only when they are just as willing to take future goods as present goods.

With our tendency to engage in more roundabout production, which takes more time, the laborers who take present goods instead of future goods discount the future value of their product for a longer period of time and find an increasing proportion of its future value going to the capitalists. Labor can increase its proportionate share of the product by lowering its time preference for present goods and taking a larger portion of its remuneration in future goods. Labor may do that as it develops more foresight and learns to enjoy more non-economic pleasures.

b. The Unequal Distribution of Wealth

Labor's time preference is affected by the unequal distribution of wealth.[6] As a result of this unequal distribution a comparatively few people have such large incomes that they put a very low premium on present goods and save such a great amount that interest is forced down to a low rate—such a low rate that labor in general prefers to discount the future value of its product and take the proceeds in present goods rather than in future goods. A more equal distribution of wealth would make it improbable that a comparatively few would save such a large amount and would result in a higher interest rate, perhaps such a high rate that laborers would take a larger portion of their wages in future goods rather than discount them so heavily in order to get present goods.

Whether this increased income would come to the laborers nominally as interest or nominally as wages depends somewhat upon one's viewpoint and somewhat upon the contractual relation into which the laborers enter. If the laborer takes his increase in the form of shares of stock in the business in which he works, or in the form of a bonus or a share of the profits, it would probably be thought of as a delayed wage payment. On the other hand, if he takes a part of the current income which he received in the form of wages and invests it in future goods, his income from his investment will likely be thought of as interest rather than as wages. The important fact

[6] *The Premises of Political Economy*, p. 135.
Also, President Walker's "Theory of Distribution."

is that the worker will receive a larger income if he takes a portion of it in future goods rather than in present goods, and it is of little consequence to him whether it be dubbed interest or wages.

Professor Patten did not think that a more equal distribution of wealth would necessarily affect the aggregate volume of savings, but that it would result in a more widely diffused ownership of savings. There would be less saved by the few and more saved by the many. He failed to specify how as large a volume of savings can be disposed of at a high rate of interest as at a low rate. It seems that it cannot be done unless there is an increase in the demand for capital on the part of business enterprisers. However, it may be that a more equal distribution of wealth would result in higher standards of living in general. Perhaps the requirements of a higher standard of living would make a greater demand for those things produced by the aid of capital and would, consequently, make a greater demand for capital.

3. Consumption Habits

A third influence which, in the opinion of Professor Patten, has a great effect on wages is consumption habits.[7] We have noted that the real measure of a worker's wage, as conceived by Patten, is the amount of food for which his wage will exchange. If we insist on trading the products of our labor for those kinds of food for the production of which our environment is not well suited, food will be dear. Wages as measured in food will be low, and rent will be high. On the other hand, if we more intelligently utilize the food-producing resources of the world, food will be cheaper, wages higher, and rents lower. Thus this form of social adjustment to the physical environment by man's conscious and intelligent adaptation to environmen frustrates Ricardo's historical principle of a tendency toward higher rents, lower profits, and subsistance wages.

As an example, Patten suggested that we might substitute the use of coffee for beer, and in so doing utilize resources which might not otherwise be used, and at the same time bring about a decreased demand for grain and for grain-growing lands of the temperate zones. With a somewhat similar effect, sugar, which is well adapted to production in the tropical regions, might be substituted for some

[7] *The Premises of Political Economy,* p. 109 ff.

products now grown largely in the temperate zones. All shifts in consumption which reduce the ratio of poor land to good land tend to raise wages and lower rents.

4. Improvements in the Agricultural Arts Relative to Improvements in the Other Arts

An increase in the efficiency of labor in the non-food-producing industries does not result in an increase in wages. Doubling the efficiency of the laborers in such industries will not necessarily have any effect on the ratios at which their products will exchange for each other. However, the workers in those industries will then have to give just twice as much of their product for a given quantity of food as before, and the landlords will be the chief, if not the sole, beneficiaries.

It follows then, as Patten indicated, that the rate at which improvements take place in the agricultural arts relative to the rates at which they take place in the other arts has a great effect on wages. Improvements in the agricultural arts take the form of a better selection of crops and seeds, improved breeds of live stock, more intelligent use of fertilizers, a better preparation of the land for planting, better cultivation of the crops, and the use of labor-saving machinery. If these improvements outrun the improvements in the other arts the value of other products will rise relative to the value of food and the wages of labor will rise. On the contrary, if improvements in the other arts outrun the improvements of the agricultural arts, foods will rise in value and wages will fall. As we have seen, improvements in the agricultural arts depend to a considerable extent upon the skill and intelligence of the farmer. So again Professor Patten becomes a propagandist for rural education and other measures which will increase the efficiency of the farmer.

5. The Foreign Trade Policy of the Nation

Another factor which may have considerable influence upon wages is the foreign trade policy of the nation.[8] Patten thought that if rent has made its appearance in a country which under conditions of free-trade exports foods and raw materials and imports manufactured

[8] *Premises of Political Economy*, p. 193.

products, a free-trade policy will have a very great effect upon the distribution of income within the nation and will lower the wages of its labor. In this connection he did not distinguish between interest, the wages of management, and pure profits, but lumped them altogether as profits. The difference between the price the manufacturer pays for his raw materials and that which he receives for his completed product is the sum out of which wages and profits are paid. Wages and profits, in the broad sense in which Patten used the term profits, will absorb the whole of this amount. It follows, then, that the larger this sum is the larger will be wages or profits or both.

It was his assumption, however, that the increase or decrease in this sum will be shared by both profits and wages. How, then, will imports and exports of the character indicated affect the amount of this sum? Patten alleged that the export of foods and raw materials from a nation will raise their prices within that nation, and that the importation of manufactured products will lower their prices within that nation. As a result, the manufacturer in that nation is at a double disadvantage because of free trade. He finds the cost of his raw material higher than it would otherwise be, while he finds the selling price of his manufactured goods lower than it would otherwise be. As a result, the fund out of which he receives profits and pays wages is diminished. On the other hand, the higher prices of raw materials and foods yield larger rents to the owners of natural monopolies. His picture of conditions was just the reverse of the England of Malthus and Ricardo, who analyzed the corn laws.

a. Factors Neglected by Patten

Professor Patten seems, however, to have neglected several important considerations. In the first place, it is quite probable that in the United States (he was thinking in terms of the United States), at the time he wrote, agricultural land rents were paying in part the costs of producing agricultural products, and were lowering the prices of agricultural products.

Perhaps many farmers had gone to the frontiers, taken up land, put it in cultivation, and cultivated it for many years with a lower current remuneration than they would have been willing to accept had they not expected a rise in the value of the land, due to the rent

which they believed it would ultimately yield. It is also likely that farms farther east were kept under cultivation when, from the standpoint of current revenue, it would have been better to abandon them. Perhaps many of them were not abandoned only because their owners expected conditions ultimately to change and the value of the land to rise.

Speculation has played a large part in the development of natural resources, just as it has in manufacturing enterprises. If the foreign trade policy of a nation causes the people to believe that the rent of natural monopolies will rise, it may lead to a more rapid and more extensive utilization of those resources than would otherwise take place. Consequently, it may bring about a lower domestic price for many raw materials and foods and higher real wages.

The United States has not followed a free-trade policy, but one that has allowed it to export a great deal of food and raw materials. If we had not been exporting these products we might have been many decades later in extending our railroads into that region west of the Mississippi River, and the great food and mineral producing regions of the West might hardly have been touched by this time. As a result, foods and raw materials might have been at a higher average price in the United States during the past eighty years than they were, and the funds available for wages and profits might have been less.

Then, too, it should be observed that the development of manufacturing centers, which is one of the aims of protections as advocated by Patten, causes rents to rise around those centers. Conceivably the rise in these rents might more than offset the lower rents prevailing in other parts of the nation, due to the curtailed exports of foods and raw materials. The extent to which this might be true depends upon several things. There will be a stronger tendency for rents to rise around the manufacturing centers in case a comparatively few large centers are developed than if many smaller centers are developed. The absence or presence of transportation facilities, which throw the more remote potential food and raw material producing regions into competition with those nearer the manufacturing centers, will also have an important effect on rents and wages.

It seems that the validity of Patten's argument depends also not merely on whether or not rent has risen in the country

exporting foods and raw materials, as he suggested; but on whether or not all the land has been brought under cultivation, the amount not under cultivation, if any, and its potential productivity relative to that of the marginal land under cultivation. If there is an abundance of land not under cultivation of about the same fertility as the marginal land under cultivation, an extension of cultivation may have but little effect on the prices of foods and raw materials, and upon the fund out of which wages and capital are paid. It may have but little if any effect on real wages.[9]

D. The Cumulative Effects of Forces Raising Wages

The effects of all of those forces which raise wages are cumulative. As the laborer's income increases there is a tendency for his premium on present goods as compared with future goods to fall. In effect, he has a greater tendency to wait until his product ripens into consumption goods. The wage earner also finds that as his income increases he has more goods to consume. But consumption takes time. That is, labor interferes with consumption, and the more goods the laborer has to consume the greater the interference. His wages must compensate him not only for his costs, but also for this interference. Every increase in wages increases the amount of interference and necessitates a further increase in wages to compensate for the additional interference.

It seems, then, that the cry for higher wages is not to be stilled by raising wages. Instead, an increase in wages places labor in a position where it is able to exert more pressure for a still higher wage. In short, the greater the portion of the surplus which labor receives the greater becomes the amount which it is able to demand. It thus seems that labor will share to an increasing extent in the surplus with the progress of society.

With every increase in wages an increasing proportion of wages comes to labor as a reward for sacrifice and a decreasing proportion comes as a compensation for costs. Should adaptation and education ever result in so adjusting people to their work that all work becomes pleasurable, all wages will come as a reward for sacrifice and there will be no cost of production.

[9] For a further consideration of the effect of foreign trade policy on wages see Chapter X.

E. Optimism and Harmony

As was suggested in the first section of this chapter, Patten's theory of wages stands in sharp contrast to the subsistence theory of wages with which Ricardo's name is associated. According to Patten, the secular trend of wages is up rather than toward a subsistence level. Furthermore, wages, profits, rent, and interest may all rise simultaneously. The subsistence theory of wages stressed the competitive aspects of society. It gave rise to emphasis on a conflict of interests and to pessimism. On the other hand, Patten's theory lays emphasis on the coöperative aspects of society. It stresses a harmony of interests and affords a basis for optimism.

Carey's theory of wages, or perhaps we should say his theory of value, afforded a basis for optimism on the part of those who would like to see the wages of labor rise. But his theory was essentially different from Patten's theory. Carey believed that the exchange value of any reproducible good is equal to the cost of reproducing it, and that through progress in the arts of production, the cost of producing goods continuously decreases. As a result, all capital decreases in value after it is produced. That is, existing capital exchanges for less labor than was required to produce it. It exchanges for only that quantity of labor required to reproduce it. As a consequence, the relative distributive share received by the capitalists decreases and the relative share received by labor increases. However, the absolute amount received by the capitalists increases because there is an increase in the amount of capital used, and as a result the capitalists have but little cause for complaint.

Carey's theory differed from Patten's theory in that Carey believed that any good has a value equal to the cost of reproducing it, while Patten believed that any good has a value equal to the expense of reproducing it. Patten held that sacrifice is an element in expense, but not an element in cost. Patten also held that the sacrifices undergone in production increase continuously with the progress of society. Thus, while costs, which are one element in the expenses of production, decrease with the progress of society, sacrifices, which are another element in expenses, increase. As a result, the expenses of producing any goods do not necessarily tend to fall. Therefore, since the value of any existing reproducible capital tends to equal the

expense of reproducing it, it does not follow, as Carey suggested, that capital decreases in value after it is produced. Consequently, the relative share received by the capitalist does not necessarily decrease with the progress of society, notwithstanding Carey's belief to the contrary.

Patten's theory suggests a far greater harmony of interests than does Carey's theory. The former suggests that an increase in real wages is not dependent on a decreasing interest rate, or on a diminution in the value of existing capital, while Carey's theory indicates that an increase in wages is dependent on one or both of those conditions.

Chapter X

The Tariff and Free Trade [1]

A. Grounds Upon Which Patten Urged Protection

In turning attention to the problem of free trade and the tariff, Professor Patten made it clear that he was not advocating protection on the same ground as did the Mercantilists, nor did he merely reproduce the arguments of Carey and List. In the case of the United States, he did not look upon it as a temporary measure to help us approximate the economic conditions prevailing in other countries with which we have commercial relations. He had no desire to make a new Europe or a new England out of the United States. He did not assume that the ideal of European civilization is that best fitted to the United States. Our conditions are much more dynamic than theirs, so he thought, and our ideal must stand in sharp contrast with the ideal adapted to static conditions as advocated by most free-traders.

Patten said: "Protection now changes from a temporary expedient to gain specific ends to a consistent endeavor to keep society dynamic and progressive. Protection also ceases to be an isolated exception to the general passive policy which it has been popular to advocate, and becomes a part of a fixed policy to increase the value of labor with the increase of productive power, and to aid in the spread of knowledge and skill, and in the adjustment of a people to its environments." [2]

Patten did not believe that there is one system of economy, the doctrines of which hold good for every time and for every civilization. He was thinking in terms of the United States at the time he wrote, and he sought the basis of an American economy through a careful examination of our economic environment.

[1] The materials upon which this chapter is based are found chiefly in: *The Premises of Political Economy,* Chapters 5 and 7. *The Economic Basis of Protection.*

[2] *The Economic Basis of Protection,* p. 7.

1. Admitted Assumptions

The protection theory which he advanced is based on the following admitted assumptions regarding this environment:

1. We are in a much more dynamic state than that of other competing countries. We are experiencing a constant growth in population, and the increased number of laborers must find employment in some way.[3]

2. Our people have only recently come here and are not adjusted to their environment. They should be shielded from foreign competition while they are in a process of discovering their economic possibilities and adjusting themselves to those possibilities.[4]

3. There is in the United States a stronger tendency than has been shown by any previous civilization to increase the distributive share going to rent and other natural monopolies, which are protected from competition, at the expense of those who must compete with one another upon equal footing. Under these conditions, increased cheapness on the part of producers does not give a proportional benefit to consumers as a whole, since much of it passes into the hands of the holders of natural monopolies.[5]

2. Implied Assumptions

There are three implied assumptions, aside from the admitted assumptions upon which Patten based his arguments for a protective tariff policy. The first of these is that it is desirable from the social viewpoint that wages, interest, and profits be high relative to rent. The second of these assumptions is that an increase in the prosperity of the people of the United States is an end toward which our government should strive. The third of his implied assumptions is that the proximate goal of our foreign trade policy should be our prosperity rather than world prosperity. He saw no conflict, however, between our prosperity and world prosperity. He believed that a more prosperous United States would tend to bring about a more prosperous world.

[3] *The Economic Basis of Protection,* p. 11.
[4] *Ibid.,* p. 12.
[5] *Ibid.,* pp. 12-13.

B. Assumptions of the Free-Traders

The strongest of Patten's arguments for protection are woven into his criticisms of the assumptions and arguments of the free-traders. He thought that the arguments of the free-traders are based upon assumptions which are unsound, many of which have been discarded by the free-traders themselves. Their assumptions are:

1. Economic conditions are static rather than dynamic.[6]
2. Men can acquire some considerable advantage by using their land for some one purpose.[7]
3. Men can make the best use of their economic opportunities by developing some one of their industrial qualities.[8]
4. Cheapness rather than productive power is the test of efficiency, and competition will lead to the survival of the most efficient producers.[9]
5. The values of all commodities stand in the same relation to each other as the quantities of labor required to produce them.[10]
6. There is a universal economy valid for every people and in every age; that is, a body of knowledge universally true.[11]

Questions very naturally arise as to whether or not Patten was justified in crediting the free-traders with the above assumptions, and if so, were the assumptions valid? To these questions we shall now give attention.

1. Assumptions One, Two, Three, Four, and the Law of Comparative Costs

The first, second, third, and fourth assumptions seem to underlie the law of comparative costs of which free-traders make so much use. This doctrine states, in effect, that it is always to the advantage of each nation to specialize in the production of those products in the production of which it has the greatest comparative advantage, and

[6] *The Economic Basis of Protection,* p. 8.
[7] *Ibid.,* p. 18.
[8] *Ibid.,* p. 19.
[9] *The Premises of Political Economy,* p. 122.
[10] *The Economic Basis of Protection,* p. 20.
[11] *Ibid.,* p. 24.

that under conditions of free-trade each nation tends to do that. This seems to imply that the advantages which a nation has are fixed; that conditions are static. However, in a dynamic society the advantages which a people have in production shift, and are today in favor of one product while tomorrow they are in favor of another product. These advantages shift because of changes in the arts of production, and their significance shifts because of changes in consumption.

a. Advantages in Production Dependent Upon Demand

In fact, the advantage of producing any product has no economic significance except as it is related to demand. To illustrate this, let us take an extremely exaggerated hypothetical case. Of what economic significance is it to the people of Texas if they have a thousand per cent advantage over the people of Alabama in the production of rag weed and only one hundred per cent advantage over the Alabamans in the production of cotton, if at the same time there is no demand for rag weed or if the demand for rag weed is so slight that a given amount of effort will produce more dollars' worth of cotton in Texas than it will of rag weed? Under such circumstances the people of Texas will not specialize in the production of rag weed, notwithstanding the fact that they have a very great comparative advantage over the Alabamans in its production. In brief, any advantage in production is dependent upon demand.

b. A Protective Policy Affects Demand

A protective policy that alters the values of products, and protective policies presumably do that, will ultimately affect consumption habits. These altered demands will bring about a change in the relative advantages of producing various products. The free-traders must either deny that protection alters consumption habits, or they must show that such changes in consumption habits as it brings about are to the economic disadvantage of the people; or else they must show that, if these changes which protection brings about are to the economic advantage of the people, they would have taken place without protection. The writer is not aware that any free trader has ever successfully denied that protection alters consumption habits, or has shown that the alteration in consumption habits caused by protection is to the economic disadvantage of the people.

However, free-traders assert or imply that whatever changes protection brings about in consumption or production would take place without protection if they are to the economic advantage of the people. This implies that people have an unerring economic instinct which always leads them to pursue that course which it is to their economic advantage to follow. If people do have such an instinct, they are pursuing their economic advantage when they adopt a protective policy, or a free-trade policy, or any other policy, or no policy at all. With such an instinct they just cannot go wrong economically. It follows, then, that there is no valid reason why any free-trader should insist that a free-trade policy is more conducive than a protective policy to production in harmony with the law of the greatest comparative advantage.

c. Free Trade Does Not Lead to the Production of Those Products for Which a Nation Is Best Fitted

But Patten contended that under conditions of free trade, nations do not produce those products for which they are best fitted. To prove this he used India, England, and the United States as examples. He said that India is much better adapted to the production of rice than to the production of wheat, yet under conditions of free trade India must import most of her manufactured products and must export agricultural products to pay for them. The people of the countries from which she buys most of her manufactured products do not care much for rice. They prefer wheat. So India is forced to devote much land, well suited to rice and poorly suited to wheat production, to the production of wheat, so that she will have something to export as a means of paying for her imports.[12]

Patten also indicated that the soil and climate of England are much better fitted to the production of wheat than the soil and climate of the United States, while the coal and iron fields of the United States are much richer and more easily worked than those of England. Yet under a free-trade policy we would export wheat to England and import iron and steel products from England.[13] As he saw it, a large number of people concentrated at any point in the

[12] *The Premises of Political Economy,* p. 185.
[13] *The Economic Basis of Protection,* p. 32.

world will draw a large part of the world's food supply to that point. Food will be dearer there than in most other places. The people located at that point will have to produce and export something with which to pay for their food, even though they are poorly fitted to produce anything at that point. A redistribution of the world's population and capital would bring about a great change in the nature of the exports from and imports to this point in question.

Forces that have caused people to concentrate at certain points in the world are often forces that spent their energy in the past and are no longer operative. Moreover, they were never solely economic forces. However, regardless of the nature of the forces that led to the concentration of population at certain points, it is often tradition, sentiment, and inertia, rather than economic advantage, which perpetuates such points as centers of population. For instance, there may have been strong economic reasons why population tended to concentrate in the British Islands in the past. The writer, however, has been unable to discover any economic reasons why a large population should remain concentrated in those islands. Briefly stated, then, much of the so-called advantage that people have in the production of particular products is social rather than physical. Tariff policies or other policies which have social effects may change advantages into disadvantages or the reverse.

(1) Physical and Social Aspects of Advantages in Production

In this connection it should be noted that advantages in production have two aspects: a physical aspect and a social aspect. Physical aspects, comparatively speaking, are unchanging. Social aspects are changing. Social conditions existing at any time are not merely the results of physical conditions, but are shaped by previous social conditions, and they, in turn, help to shape future social conditions. Thus the advantage which a nation has in the production of any product at any time is largely determined by the policies followed by the people at that time and in preceding periods. Whether or not it is beneficial for a nation to specialize in the production of those things in which it has the greatest comparative advantage is not, when properly understood, a controversial point between the free-traders and protectionists. The fundamental difference between the

two schools of thought is this. The free-traders accept as fixed and beyond human control the physical advantages in production existing at any given time. As they appear to see it, these advantages are the result of relatively stable conditions. In contrast, the protectionists accept the advantages existing at any given time as largely man made and within the power of society to modify. They accept the idea of conscious social planning.

d. Free Trade Not Conducive to Specialization in the Most Advantageous Fields in a Dynamic Society

If the free-trader denies that his ideal is a static state, his denial will force him into an admission which is no less damaging to his argument. As we have said, one of the alleged advantages of free trade is that it enables people to specialize in the production of that for which, as related to their resources, they are best adapted. But in a dynamic state, under the impact of changes in the arts of production and habits of consumption, this adaptation does not remain fixed. Under these conditions as they exist at one time a given people may be best adapted to produce tobacco, at another time cotton, at another time wheat, at another time cotton cloth, and at other times still other things. Under the free-trade ideal of producing only those things in the production of which they have the greatest comparative advantage, in seeking the field of their best adaptation, people will be continuously shifting from one to another field of production in a dynamic society, and will become specialists in nothing. As a result, the alleged specialization under free trade will turn out to be a myth, at least in the sense that the people develop any great skill in the production of anything. People cannot afford to specialize their skill and capital unless they have some way to protect their skill and property from becoming economically useless. Sometimes the protection is found in relaltively static social conditions, characteristics of which are likely to be binding social customs, deep respect for traditions, or strong prejudices. In dynamic societies it is alleged that sometimes this protection is found in banker control of industry, inter-locking directorates, labor unions, associations of professional men, and various other monopolistic devices. The protective tariff is just one more device designed for the same end.

Since the free-trader claims that specialization in the field of greatest comparative advantage is one of the benefits of the free-trade system, and since the free-trade system is not conducive to specialization in a dynamic society, it seems that Patten is thoroughly justified in his allegation that one of the assumptions of the free-trader is a static state. It seems equally true that the assumption is false if given the character of universality or if applied to the United States.

The validity of the second, third, and fourth assumptions of the free-traders seems to stand or fall with that of the first. If the first is false, they too are false. However, Patten advanced more specific objections to them.

2. Further Consideration of the Second Assumption

Patten denied the second assumption, that is, that men acquire some considerable advantage by using their land for some one purpose.[14] He thought it much better to use land for a rotation of crops than for one crop, as it seemed to him that rotation would better preserve the fertility of the soil, spread the demand for labor more evenly throughout the year, and serve somewhat as an insurance against weather and price conditions which might be unfavorable for any one crop. He thought that a protective tariff brings about a better utilization of the land of the United States. It creates a market in the United States for many things for the production of which our land is well suited.

As an example, the land of Illinois may be better suited for the production of milk, fruits, poultry, pork, and vegetables than for the production of wheat. Yet if Illinois must produce for a distant market it may not produce much milk, poultry, fruits, and vegetables because of the difficulties of transporting them great distances. Under such circumstances it is likely to concentrate on the production of wheat, as it did at one time. A protective policy, that builds up a local market for the perishable products referred to above, diverts much of the land to the production of such products. This diversion comes about not because the value of wheat has fallen, but because the value of the other agricultural products referred to has risen.

[14] *Ibid.*, p. 29.

This is attested to by the fact that with the development of diversified farming in Illinois it became profitable to produce wheat in Minnesota, North and South Dakota, and other regions which were outside the margin of wheat cultivation at the time Illinois was concentrating in the production of wheat. If the protective policy had made wheat less valuable, we should not have found the production of wheat spreading to poorer land. On the contrary, we should have found its production limited to the best of the land.[15]

Perhaps the protective policy has made it possible to use much Illinois land for other things for which it is better suited than for the production of wheat. The fact that the value of the land was rising at the time the diversification in its use was taking place is further evidence that the land was being better utilized. Much of our land has many qualities and its best utilization depends largely upon social conditions, many of which may be influenced by a protective policy.

To the reader it may appear that the argument just advanced, to the effect that protection has not lowered the value of wheat, is out of harmony with the argument advanced elsewhere in this chapter that protection lowers the value of food in the United States. There would be a lack of harmony if wheat were the sole or chief food of our people. But there is no lack of harmony if protection leads the people to use the foods which our land is best suited to produce. In such a case every improvement in the utilization of land tends to reduce the value of food, even though it may not lead to a reduction in the value of some particular kinds of food.

3. Further Consideration of the Third Assumption

Patten thought that the third assumption of the free-traders, that is, that men can make the best use of their economic opportunities by developing some one of their industrial qualities, is not valid.[16] On the contrary, he claimed that in the case of the United States a protective policy brings about a better utilization of our labor and an increase in our productive power. He thought that the people of our country have a great variety of potential abilities. These poten-

[15] *The Stability of Prices,* Publication of The American Economic Association, Vol. III, No. 6, p. 29.
[16] *Ibid.,* p. 29.

tialities can only be developed and utilized if the people have a great variety of occupations open to them.

a. A Passive Versus an Active Policy

Under a passive policy the people of any section tend to concentrate their labor on the production of some one or a few products, such as cotton, wheat, or tobacco. But not all of the labor in the tobacco-growing region has any special aptitude more useful in the production of tobacco than in the production of anything else. Likewise, not all the labor in the cotton or wheat growing region has any special aptitude more useful in the production of cotton or wheat, as the case may be, than in the production of anything else. The aptitudes or qualities of human beings in tobacco, cotton, or wheat growing regions are not so uniform as that. The place or section in which one is born constitutes no adequate test of his aptitudes. It should be recalled that the free-trade theory assumes that under conditions of free trade both natural resources and human resources will be used to the best advantage. This, of course, implies that the people of any region have a greater aptitude for the production of those products for which that region is especially suited than they have for the production of anything else. If such a conjuncture between resources and aptitudes ever occurs, it can hardly be expected to exist in a new society, such as ours, where the race has had but a short time to adjust itself to its environment. If after a long period of natural selection it does occur, through the elimination of those not especially suited to the environment, the price paid for adaptation to environment will be much in the way of human suffering and wasted human powers. The probability of its ever occurring is so doubtful, the trail of human suffering that would mark the path to such a goal is so great, the remoteness of the time of its attainment if it is ever attained is so far in the future, and the desirability of such highly standardized and uniform human qualities over large areas is so questionable, that an economist can hardly be censured for rejecting it as a valid hypothesis upon which to erect an economic policy designed to improve the economic conditions of those now living and those who will live in the next few generations.

An active social policy recognizes that the effectiveness with which the nation's productive power is used depends not merely upon the

country's natural resources and the contemporary skill of the people, but also upon the latent qualities of the people. Except in rare instances these qualities will not flower under just any conditions. The environment must be made favorable for them. To the advocate of an active social policy, the idea that the economic activities of people under conditions of free trade are determined solely by their natural resources and aptitudes seems far from true. On the contrary, custom, inertia, ignorance, prejudice, the uncertainty of new ventures, ethical ideas, and the character, location, and magnitude of demand all play a part in determining the direction which a people's economic activity takes.

A passive policy is likely to sacrifice the advantages of natural resources or special aptitudes upon the altar of custom, prejudice, ignorance, timidity, private gain, or temporary advantage. An active policy recognizes that the most effective utilization of the nation's labor depends upon an intelligent training and coördination of the labor. Its goal is not the production of the maximum exchange values, but rather the development of the maximum productive power. The training given the worker might be given in a public school or in a factory subsidized by the tariff or in some other way. The aim is the same, regardless of the method adopted or the manner of defraying its expense.

In short, Patten believed in an active policy; in national economic planning a generation in advance of any general discussion of this now popular topic, rather than in reliance upon a benevolent hand or the slowly working law of natural selection, in order to secure a better utilization of our labor. He believed that the protective tariff must play an essential part in that planning if our increasing population is to employ its labor with increasing effectiveness.

4. Further Consideration of the Fourth Assumption

Patten disagreed with the free-trade assumption that cheapness is the test of efficiency and that competition will lead to the survival of the most efficient producers. Cheapness is the criterion which the free-traders use to determine the advantages of exchange.[17]

[17] *Premises of Political Economy,* Chapter V.

a. Cheapness Not a Test of Efficiency

Cheapness is a measure of the expenses of production, but it is not a measure of the cost of production or of the efficiency of labor. The employer who uses the most efficient labor is not necessarily in a position to undersell other producers. But the employer who pays the lowest wage relative to the efficiency of his workers is always in a position to undersell other producers, even though other producers are employing far more efficient labor. Products do not exchange in proportion to their costs of production, but in proportion to their expenses of production.

Labor with low standards of living has but few economic goods to enjoy. Such labor undergoes but little sacrifice in producing. Practically its whole wage is a remuneration for costs, and that wage is likely to be very low. Labor with higher standards of living has much more to enjoy. It may undergo much sacrifice in production. Its wage has to be high enough not only to remunerate it for its costs, but also to reward it for its sacrifice. It may be much more efficient than the poorly paid labor, yet in competition for jobs it will lose out unless it is more efficient in proportion to the wage it demands than is the inefficient laborer in proportion to his wages. The employer is much more interested in his expenses of production than he is in his employees. If there were no way to reduce the expenses of production except through the employment of more efficient workers, we could say that competition leads to the survival of the most efficient workers.

(1) Competition, Efficiency, and Standards of Living

However, competition often leads to a reduction in wages rather than in an improvement in the efficiency of workers. Those workers who are willing to work for the lowest wages in proportion to their efficiency have the advantage over other workers in securing and holding jobs. If workers with a high degree of efficiency and high standards of living are thrown into competition with workers with a low standard of living and a low degree of efficiency, the latter are likely to drive the former out of employment. This is so because people with low standards of living are usually in a weaker bargaining position than those with a high standard of living. They will

more quickly submit to a wage reduction or to low wages in order to receive employment. The ratio of wages to efficiency which they accept becomes the ratio which all others competing with them must accept. This is true whether the competing workers be located in the same or in different nations. The workers who accept a wage reduction may be in just as good a position to crowd other workers out as is the worker who improves his efficiency. The free-trader appears to overlook this.

Labor with a low standard of living and a low degree of efficiency tends to displace labor with a high standard of living and a high degree of efficiency not only in those fields of employment in which the two come into direct competition, but in other fields as well.[18] It is people with high standards of living who demand the products of other people with high standards of living. It is the people with high standards of living who demand the services of the most efficient surgeons, dentists, teachers, architects, artists, mechanics, and others who might be mentioned. If workers with low standards of living displace those with high standards of living in any fields, there will be a decrease in the demand for the more efficient workmen in other fields. This tendency which has just been described might very appropriately be called "Gresham's Law of Labor."

(2) Competition and Progress

As Patten presented his ideas in *The Theory of Social Forces,* competition is not the proximate cause of progress, as some think, but on the contrary it is the proximate enemy of progress. It will be recalled that he indicated that in any environment in which organisms exist they will increase in numbers up to the limit of their food supply. There will be no evolution in the structure or habits of those organisms which remain in this competitive arena. There is no chance for progress unless a more complex environment is found to which the more complex of the organisms can escape and from which the other organisms are completely shut off. The organism that progresses is the one that escapes the competitive struggle. Free trade is a device which intensifies the competitive struggle and is therefore subversive to progress, while protection has the opposite effect, as it furnishes a refuge from the competitive struggle.

[18] *The Premises of Political Economy,* p. 131.

b. Productive Power Rather Than Cheapness Is the Test of Efficiency

Moreover, cheapness cannot be a test of the efficiency of producers as a whole, because doubling the efficiency of all producers would not bring about cheap products. It would not alter the ratios at which products exchange for each other. Cheapness cannot be universal. If some things are cheap, other things are necessarily dear. The test of efficiency, then, is not cheapness; but instead, as List said, it is productive power.[19] The test of productive power which Patten applied is not the creation of exchange values, but self-sufficiency, and self-sufficiency is something that a protective tariff tends to develop. It does this through its influence on both consumption and production.

c. Cheapness and the Harmony of Interests

Furthermore, it seems that free-traders assume a harmony of interests which does not exist. It is to the interest of individuals that the products which they purchase should be cheap. But cheapness for some means dearness for others. It means a lack of balance in the economic system, or it means that some producers are lagging behind others in increasing their productive power, or else it means that some producers are in a monopolistic position relative to others. One or another group of individuals may profit from any one of these conditions. But it is extremely improbable that any one of the conditions is to the advantage of a nation as a whole. If consumption were the only economic activity of the people of a nation cheapness would be desirable. On the other hand, if production were the only economic activity of the people dearness would be desirable. As it is, neither cheapness nor dearness is universally desired by the people of a nation. There is no harmony of interests.

5. Assumption Number Five and the Demand for Labor

The fifth assumption of the free-traders, the assumption that the values of all commodities stand in the same relation to each other as the quantities of labor required to produce them, forms the basis for the argument that a protective tariff cannot increase the demand for

[19] *The Premises of Political Economy,* Chapter V.

labor or the real wages of labor. The free-trade argument asserts that imports pay for exports; that if through a tariff policy a country reduces its imports it will also find its exports reduced by an equal value; that a tariff policy destroys a demand for labor in the exporting industries equal to that demand for labor which it creates in the protected industries.[20]

a. Protection Substitutes One Demand for Labor for Another Demand

In brief, the free-trade theory asserts that a protective policy substitutes one demand for labor for another demand without altering the magnitude of the demand.

This assertion seems untrue as is indicated by a simple illustration. Let us assume that under a free-trade policy $2,000 worth of wheat is exported from the United States to England and exchanged for $2,000 worth of cutlery which is imported into the United States. Let us further assume that five-tenths of the value of the wheat is distributed as rent, that two-tenths of its value is distributed as interest and profits, and that three-tenths of its value is distributed as wages. When we export $2,000 worth of wheat we export $600 worth of labor. In the case of the cutlery let us assume that two-tenths of its value is distributed as rent, that three-tenths of its value is distributed as interest and profits, and five-tenths distributed as wages. When we import the cutlery we import $1,000 worth of labor. We import labor of greater value than we export, notwithstanding the fact that the value of our exports and our imports are equal. Under the given conditions it seems that a protective policy would increase the demand for labor in the United States.

b. The Beneficiaries of Free Trade

At the time Patten wrote, the chief exports of the United States were foods and raw materials; and it appeared to him that under conditions of free trade the chief beneficiaries of our foreign trade would be the owners of our natural monopolies, because our exports would raise the prices of foods and raw materials in the United

[20] *The Premises of Political Economy,* pp. 195 ff.

States, and consequently increase the rents received by the owners of natural monopolies. At the same time those engaged in manufacturing would have to pay more for their foods and raw materials and would find the domestic prices of their manufactured products depressed by the importation of manufactured products. As a result real wages and profits in the manufacturing industries would be decreased.[21] Competition would bring profits and wages in the exporting industries down to the level prevailing in the manufacturing industries. If wages were higher in the United States than abroad it would be solely because of the greater efficiency of American labor. The superior benefits of our natural resources would go to the owners of those resources.

For example, if one of two isolated nations has twenty acres of land per worker and the other has ten acres of similar fertility per worker, and the workers are of equal efficiency in the two nations, the marginal productivity per worker will be less in the second nation than in the first, and the real wages of labor will be less in the second nation than in the first. Now if these two countries break away from their isolation and enter into free trade with each other they will constitute a single market for labor. The wage rate will be the same in the two nations. Any difference in the productivity of the workers due to superior resources will be distributed as rent. When the two nations are united into one free-trade area the number of acres of land per worker in this trade area will be less than it formerly was in the less densely settled of the two nations, and it will be more than it formerly was in the more densely settled of the two nations. The effect of this on the value of food, rent, and real wages in the less densely settled of the two nations is identical with that caused by an increase in the density of its population, which causes an extension of cultivation to poorer lands.[22]

The owners of natural monopolies in the less densely settled of these two nations benefit from free trade not only because of the

[21] For a further consideration of this see the preceding chapter.

[22] *The Economic Basis of Protection,* p. 47.

The argument presented here is presented by L. A. Rufener in *Principles of Economics,* Chapter XXV, published in 1927. Rufener credits T. N. Carver with the argument, but Patten presented it more than thirty years in advance of Carver.

rise in their rents but also because it lowers the value of the manufactured products which they buy. The laborers in that country lose not only because of a fall in wages but also because of a rise in the value of food.

When a nation's exports and imports of merchandise balance, that nation exports and imports equal quantities of labor only on condition that the value of its imports and the value of its exports stand in the same relation to each other as the quantities of labor required to produce them. That is a labor theory of value which perhaps few, if any, economists would seriously undertake to defend, and it is a theory of value which in the writer's opinion is unsound. It seems that the theory that a protective tariff cannot increase the demand for labor and the wages of labor must either be defended upon some other ground or discarded.

Moreover, it appears that some of the free-traders, if they were entirely logical, would admit that protection can raise the real wages of labor, because some free-trade economists admit that protection can benefit particular groups. Just what grounds are there for asserting that labor is not one of the particular groups that can be benefited by protection? Is it that these economists have in mind some wage fund that cannot be altered by any alteration in the values of goods or services?

6. Assumption Number Six

The unconditional or universal character which the free-traders give to most of their arguments is based upon the sixth assumption, the assumption that there is a universal economy valid for all people at all times. Since the days of the German Historical School such an assumption has been open to serious question, and it is rarely made by economists when dealing with subjects other than protection and free trade. To Professor Patten it appeared that the foreign trade policy of the United States should not be based upon such a sweeping and questionable assumption. Instead he would have us form our foreign trade policy in the light of the economic conditions existing in this country and in competing countries. The foreign trade policy which he recommended for the United States at the time he wrote is not necessarily the policy that he would recom-

mend at some other time, when our exports consist largely of manufactured products rather than foods and raw materials. He was advocating a policy for the United States in the fourth quarter of the nineteenth century, and a policy which is not necessarily advisable in the second quarter of the twentieth century.

C. Patten's Contribution to Tariff and Free-Trade Theory

1. Comparative Advantage

Professor Patten indicated that comparative advantage in production is largely socially determined. Under some social conditions a nation may have a comparative advantage in the production of certain products while under other social conditions it may have a comparative advantage in the production of other products. A protective tariff affects social conditions. Thus under free trade a nation may have a comparative advantage in producing some products while under a protective policy its comparative advantage may lie elsewhere. It does not follow then, as is alleged by the free-traders, that a protective tariff necessarily diverts the productive energy of a nation from more advantageous to less advantageous fields.

2. The Test of Efficiency

For cheapness Patten substituted productive power as a test of efficiency. Cheapness merely leads to a survival of those who will work for the lowest wage in proportion to their efficiency. Poorly paid labor, which consequently undergoes but little sacrifice in production, is likely to command a wage but little if any larger than is sufficient to compensate it for its cost. Even though its efficiency is low it is likely to accept a wage which is lower in proportion to its efficiency than the wage accepted by the more efficient labor. It follows then that under conditions of free trade relatively inefficient labor is likely to drive out of employment the more efficient labor. Cheapness is merely a test of the ratio of wages to efficiency. Furthermore, if some things are cheap other things are dear. Cheapness cannot be universal, while conceivably efficiency can be universal. Therefore, cheapness cannot be a test of efficiency.

3. The Nation That Loses from Free Trade

The proponents of free trade have assumed that it is beneficial not only to the parties engaged in international trade but also to their respective nations. They have spent considerable time and thought in trying to determine which of two nations, under a given set of conditions, benefits most from free trade.

On the contrary, Patten gave consideration to the question of the losses that a nation may incur by following a free-trade policy. He found that if a nation with a large quantity and variety of resources in proportion to its population enters into free trade with a nation with a dense population in proportion to its resources, the economic effect in the first country will be the same as that which would result if its population should increase in proportion to its resources. Professor Patten concluded that such a result is contrary to the economic well-being of the nation. This conclusion was based upon the assumption that the economic well-being of the nation demands that wages, interest, and profits be high relative to rent. If one accepts that assumption it seems that he must accept Professor Patten's conclusion.[23]

[23] Many of the arguments presented by Patten for protection are presented by T. N. Carver in *Principles of National Economy,* Chapter XXXII, published in 1921.

Chapter XI

Patten's Contributions and Influence

A. Patten's Contribution, a New Orientation to Economic Thought

In this brief summary of Patten's contributions to economic thought we shall assume that the reader is familiar with what has already been said in this volume. It is not our purpose here to present a short or royal road into the heart of Patten's economics. It is not our purpose to rehearse all of his theories, many of which are ingenious, enlightening, and original. Patten made important contributions to the discussions of many current economic problems, such as the protective tariff and wages. Yet it appears to the writer that his chief contributions lie elsewhere. They lie in a group of ideas which have given or seem destined to give a new orientation to economic thought. These ideas furnished a background for all of Patten's thinking and they colored all of his views. To these contributions we shall now give attention.

1. Patten's Dynamic Concept

One of these significant contributions is Patten's concept of and emphasis on a dynamic society. The German Historical School had done lip service to the idea of change. It had become popular for economists to set forth theories "applicable in a given state of the arts" or under "a given set of conditions." Perpetualism in economics was on the wane. But it remained for Patten to state economic theories "applicable to a changing society." It remained for him to write an economics in which the dynamic concept intrudes so incessantly upon the stage that the reader and writer are continuously aware that the society under discussion is a dynamic society.

2. Patten's Emphasis on Social Phenomena

Another important contribution of Patten to economic thought is the role in which he cast social phenomena. In the dynamic society

which Patten saw, each successive change in society conditions the succeeding changes. On the one hand, this means that the physical world external to man, and aside from those forms which it takes under the guidance of man's brain and brawn, plays a less determinant part in economic phenomena than preceding economic theory had usually ascribed to it. On the other hand, it means that social forces play a much more important part in economic phenomena than economic theory had assumed.

It also indicates that the contrast often drawn between so-called natural laws and artificial laws has no basis in fact. Social change, evolution, and conscious planning are seen to be just as natural as anything else in the world. In short, the dynamic concept which played such a vital part in Patten's thinking is giving a new orientation to economic thought. To some it suggests social planning within the frame-work of the capitalistic system. To others it suggests socialism. To still others it suggests the inadequacy of Neo-classicism as an explanation of modern economic phenomena and the need for a reconstruction of economic theory. To an even larger number, perhaps, it suggests the advisability of thinking less in terms of so-called natural laws and more in terms of social forces. To many it opens the door of optimism. Its potential effect not merely upon economic theory, but also upon economic institutions, is very great.

3. Patten's Theory of Consumption

Patten's analysis of consumption constitutes another distinct contribution to economic thought. Preceding economists had given relatively little attention to consumption. Perhaps the most important generalization drawn from their consideration of the subject was that consumption obeys a law of diminishing utility. Patten indicated that such a law is applicable only to a static society, and that in a dynamic society consumption obeys a law of increasing utility. The acceptance of such a law seems to require a reconsideration of value theory, since all current theories of value with which the writer is familiar are based on the idea that consumption obeys a law of diminishing utility.

Patten also suggested that habits of consumption are subject to the law of the survival of the fittest. Discordant elements in consumption are being continuously discarded. All human conduct, including

habits of consumption, must ultimately meet the test of social utility. Those consumption habits that pass this test survive. Those that fail this test perish. Our habits of consumption go through a continuous process of adjustment to environment.

4. Patten's Law of Increasing Returns

Patten's name is not so generally associated with production as with consumption. Yet it seems to the writer that he made very significant contributions to the subject of production. The older economic theories and even those widely held today are based on the idea that production obeys a law of diminishing returns; that nature offers an ever-increasing resistance to man's efforts. Occasionally a Bastiat or a Carey arose who questioned this law. But they were unable to deflect the current of economic thought. To a very great extent the cause of poverty continued to be sought in the niggardliness of nature, that is, in the limitations which nature external to man imposes upon his productive power.

Patten sought a very different explanation of the limitations on man's productive power. He saw that in a dynamic society nature external to man does not offer an increasing resistance to man's productive effort. Instead he found that it offers a decreasing resistance, and that the limitations on man's productive power are not imposed by nature external to man. He found that the limitations on production are imposed by man's knowledge of the arts of production and the extent to which his consumption is adapted to his environment. In short, the limitations are socially imposed. In a dynamic society man's knowledge of productive processes continuously increases and his habits of consumption become better and better adapted to his environment. Consequently, production obeys a law of increasing returns or decreasing costs.

Under such conditions man's relation to land is quite different from that assumed by the Ricardian law of rent. The fertility of land can no longer be thought of as depending solely upon the quality of soil or climate or the location of land. Fertility is seen to involve a subjective-objective relationship. As a result of changes in man's knowledge of the arts of production and changes in his habits of consumption, a piece of land which is entirely devoid of fertility today and completely outside the margin of cultivation may be the most

fertile piece of land under cultivation tomorrow. The extension of cultivation does not necessarily proceed from the more fertile to the less fertile land.

The Ricardian theory may afford a very satisfactory explanation of rent in a static society. But when applied in a dynamic society it gives rise to erroneous implications and otherwise affords an inadequate explanation. It seems to the writer that Patten has indicated the direction that economic thought must take if it is to work out a theory of rent applicable to our present-day society.

5. Patten's Surplus Economy

One of Patten's greatest contributions to economic thought is his idea of a surplus economy. He indicated that as a result of the operation of the laws of increasing utility and decreasing costs a surplus gradually emerges and increases with the progress of society. The idea was not entirely new. Even the Physiocrats had observed a net product or surplus, which they attributed to land. Karl Marx had observed a surplus value, which he attributed to labor.

The surplus which Patten saw is not attributable to any one agent of production. Instead it is attributable to the general progress of society. In the writer's opinion Patten's contribution to the idea of surplus is of no less importance than that of the Physiocrats or Marx, notwithstanding the fact that it has attracted less attention than their contributions. The Physiocratic idea of a surplus, along with their idea of natural laws, was seized upon and popularized by those whose interests were with the landed aristocracy, and by those who, for one or another reason, were seeking a firm anchor for the established order in a revolutionary period. The Marxian idea received a great deal of attention because of its threat to the established order. It seemed to afford a working hypothesis for those who were opposed to the established order.

Patten's surplus economy seemed to afford no immediate threat to the established order. On the contrary, it appeared to afford a basis for justifying the established order. No group of producers was cut off from a share of the surplus which he saw. There was no suggestion in it that anyone was being exploited. There was no implication in it that with the passing of time the share received by any one of the factors of production would experience a decrease. It was a

surplus in which all the agents of production might share. If the established order had been seriously threatened at the time Patten wrote, no doubt his theory of a surplus economy would have been advanced as a defense and justification for that order. As it was, Patten's theory of a surplus economy was allowed to slumber.

In the writer's opinion, however, the surplus economy of Patten affords just as powerful a weapon for the socialists as does the surplus value of Marx. This appears to be so because it affords a basis for the allegation that the cause of poverty, in a society that has emerged into a surplus economy, cannot be found in a scarcity of goods. Instead the cause of poverty must be found in those institutions which affect the exchange and distribution of wealth.

Should any large body of thinkers become seriously impressed with Patten's theory of a surplus economy, it may mean that the spotlight will be turned on many of our institutions. If that happens no one can foretell the result, but it may bring about very fundamental and significant changes. In a society which is so strongly wedded to the capitalistic system as is ours, it is quite probable that the removal of poverty would first be sought through a recasting of those institutions which affect the exchange of wealth; that is, through changes in our monetary and banking institutions, and changes in other restrictive institutions and conditions which appear to clog up the channels of trade. If these transformations should prove to be in vain, then there might be a rising tide of opinion demanding a change in some of those institutions more directly affecting the distribution of wealth.

It appears to the writer that the implications of Patten's theory of a surplus economy are far reaching, and that the theory may not only profoundly affect the direction of our economic thinking in the future, but also the form and nature of many of our institutions. The Institutional Economist, like Veblen, Commons, or Mitchell, appears to be a logical fruit of Patten's theory. Institutions show a great tendency to overlap and to evolve. For instance, that which starts as an economic institution may evolve into a legal institution. As a result, the realistic institutional economist may stray far afield and outside the domains of traditional economics. The economist of the future may, in reality, be a political economist like Adam Smith, or he may be an applied economist, or a welfare economist like Hobson.

6. Patten on Competition and Efficiency

In Patten's discussion of competition and efficiency he made other important contributions to economic thought. The Classical and Neo-classical economists had assumed or implied that competition leads to the survival of the most efficient producers. They accepted cheapness as the test of efficiency and assumed that cheapness is socially desirable.

Patten rejected the idea that cheapness is socially desirable. He suggested that the members of society are both producers and consumers. As producers they desire dear products and as consumers they desire cheap products. Consequently neither dearness nor cheapness is universally nor socially desirable.

Patten also rejected the idea that cheapness is the test of efficiency. He indicated that doubling the efficiency of all workers will not bring about cheap products; that it will not alter the ratios at which products exchange for each other. Cheapness cannot be universal. Efficiency may be universal. Therefore, cheapness cannot be the test of efficiency. Instead of cheapness, Patten accepted productive power as a test of efficiency.

Furthermore, Patten indicated that the power of one producer to undersell another is not dependent upon his efficiency. Instead it is dependent upon his power to drive his expenses of production down below those of his competitor. Therefore, as an employer he seeks not the most efficient labor, but that labor which will work for the lowest wage in proportion to its efficiency. Under competitive conditions the employer is more likely to hire labor with low standards of living and a low degree of efficiency than labor with high standards of living and a high degree of efficiency. This is true because, generally speaking, labor with low standards of living and low efficiency undergoes but little sacrifice in working, since it has but little to consume which gives pleasure and also because it has but little reserve upon which it can subsist while it resists a downward pressure on wages. Consequently, its resistance to the downward pressure is soon broken. The ratio of wages to efficiency which this labor accepts becomes the ratio which all competing labor must accept. It is only when workers with higher efficiency cut themselves off from the effects of competition through a tariff or some other protective device,

that they are able to maintain their standards of living and efficiency.

As a result, Patten rejected competition as a proper basis for regulating industry. In its stead he accepted coöperation. In general, it appears that the coöperation which he advocated is the voluntary type. It would, perhaps, embrace such developments as insurance, building and loan associations, widespread corporate ownership, trade associations, labor unions, and educational activities.

In his advocacy of coöperation Patten was not only an advocate, but a prophet (forty-eight years ago) of coming institutions. There are now strong indications that the realistic economist of the future will write an economics of the coöperative or semi-monopolistic society rather than economics of a purely competitive society. If so, he will find that Patten indicated, in broad outline, the direction which such economic thought is likely to take.

B. Patten's Influence

As we have suggested, Patten's influence has largely shown itself in its effect on the orientation of economic thinking. Those, if any, who expected to see his influence express itself in a school of economic thought have been disappointed. The failure of such a school to materialize has probably been due to two causes which we shall now consider.

1. Doubt as to Patten's Position on Many Questions

One of these causes has been the prevailing doubt as to Patten's position on many of the subjects which have absorbed the attention of economists. This doubt has two sources.

One of the sources of this doubt is found in the fragmentary nature of much of Patten's writings. He never brought together and organized his doctrines toward the end of his maturity as a thinker. Frequently he even failed to bring together his ideas upon a particular subject. Consequently, his ideas and doctrines are not available in a systematic form nor without a great deal of effort on the part of the student. Often the titles to his works are misleading. His most pertinent ideas on a subject are sometimes omitted entirely from some nominal discussion of that subject, and are then found tucked away somewhere in the nominal discussion of some other subject.

A second source of this doubt is found in the prevalent idea that Patten was inconsistent and contradictory; that a follower of his would, of necessity, have to be an intellectual tramp, hardly knowing where to hang his hat at the end of each day. Perhaps no one would allege that Patten was a paragon of consistency. All of his theories were based upon the assumption that this is a dynamic or changing world. Since he felt and lived as though he were a part of the world, he was, of course, changing and inconsistent. Consistency demanded that he be inconsistent. With him truth was conditional. A statement or theory might be true under certain conditions or at certain times, but under other conditions or at other times it might be false. A given economic policy might be wise under certain conditions or at certain times, but under other conditions or at other times it might be unwise. One of the first principles that must be grasped in any attempt to understand Patten is that he had a persistent belief that this is a dynamic world.

Yet Patten's inconsistency was often more apparent than real. The allegation that he was inconsistent has arisen in some cases, perhaps, from the fact that he often used words outside of their usual meaning without any attempt to define them. Then, too, sometimes he used the same word in different senses without forewarning the reader or listener. As examples, at times he used value in the objective sense and at other times in the subjective sense. Sometimes he used price as a monetary measure of objective value and sometimes as a synonym for objective value.

Then, too, the charge of inconsistency is, perhaps, sometimes due to the fact that the critic makes no serious attempt to harmonize Patten's superficial inconsistencies and find the unifying cords that pervade his thinking. As an example of this, Patten sometimes used costs of production to mean all the pains undergone in production and sometimes to mean only the pains of exertion and toil. This superficial inconsistency melts away when the reader comes to understand that, as conceived by Patten, the only pains undergone in production are the pains of exertion and toil.

The writer does not entertain the idea that Patten was unusually or unduly inconsistent. Instead he finds in Patten a logical harmony that is lacking in the writings of many men to whom the term inconsistency has seldom if ever been applied. Indeed, a striking

characteristic of Patten is the persistency of certain ideas. To cite examples: Patten never wavered in his belief in a dynamic society. Throughout his writings emphasis was upon the human element, upon social institutions, and upon social forces, rather than upon the phenomena or laws of the physical world external to man. An essential thing with him, always, was an increase in productive power rather than the creation of exchange values. Nowhere did he exalt competition or depreciate coöperation. Nowhere did his loyalty to the spirit of nationalism and the protective tariff wane. Everywhere he eschewed absolutism.

At times Patten lacked clarity of expression, and unless the reader has a fair perspective of his works as a whole a misinterpretation is probable. Several such misinterpretations are likely to give rise to the belief that he was inconsistent. He cannot be interpreted sentence by sentence or book by book. Every work of Patten gave the writer additional light on all of the other works of Patten. All in all, the writer was much more impressed by the harmony than by the inconsistency of Patten's works. Nevertheless, the current belief that he was inconsistent has, no doubt, deterred many from a careful study of his works.

2. Patten Encouraged Independent Thinking

It is hardly to be expected that Patten would father a new school of thought. He did not have much of the spirit of the conformist, nor did he inspire that spirit in his students or in those who read his works. He was more interested in having them think than in having them agree with him, and he inspired them to that end. Probably he would have been greatly disappointed had any large number of them echoed his ideas. He felt no flattery when people agreed with him. Instead he longed to see the light of new ideas radiating from their faces.

Patten's followers are not those who think as he thought, but they are those whom he inspired to think.

Bibliography

I. Works of Simon N. Patten

A. Books

1. 1878 *Das finanzwesen der Staaten undt Stadte der Nordamerikanischen Union.* Jena; G. Fischer. Out of print.

2. 1885 *The Premises of Political Economy;* Being a Re-examination of Certain Fundamental Principles of Economic Science. Lippincott, pp. 244. Out of print.

3. 1889 *The Consumption of Wealth.*
Publications of the University of Pennsylvania. *Pol. Econ. and Pub. Law Series,* No. 4. Second Edition, 1901. pp. 60. Out of print.

4. 1890 *The Economic Basis of Protection.* Lippincott, pp. 144, Second Edition, 1895. Out of print.
French translation of the second edition by F. Lepelletier, *Les Fondements economique de la protection, avec une preface par Paul Cauwes,* Paris. V. Giard and E. Briere, 1899.
Italian translation: *La base economica della protezione.* Traduzione di C. Baer, in Biblioteca dell economista Torino, 1897, Series 4, Vol. I, part 2.

*5. 1892 *The Theory of Dynamic Economics.*
Publications of the University of Pennsylvania. *Pol. Econ. and Pub. Law Series,* whole No. 11, pp. 153. Out of print.

6. 1896 *The Theory of Social Forces.* Supplement to Annals of the American Academy of Pol. and Soc. Science, January, pp. 151.
Italian translation: *Teoria delle Forze Sociali.* C. Colombo, Editore, Roma. No. 2. Biblioteca Internationale da Sociologia Teorica. Diretta del Dr. Faust Squillace.

7. 1899 *The Development of English Thought.* Macmillan, pp. 415. Second edition, 1904; third edition, 1910.

8. 1902 *The Theory of Prosperity.* Macmillan, pp. 237. Out of print.

9. 1903 *Heredity and Social Progress.* Macmillan, pp. 209. Out of print.

10. 1907 *The New Basis of Civilization.*
The Kennedy Lectures for 1905 in the School of Philanthropy conducted by the Charity Organization Society of the City of New York. Macmillan, pp. 220. Second edition, 1907; third edition, 1910; fourth edition, 1912; fifth edition, 1914; sixth edition, 1915; seventh edition, 1918; eighth edition, 1921.

11. 1909 *Product and Climax.* Huebsch, pp. 68.

12. 1911 *The Social Basis of Religion.* Macmillan, pp. 247. Second edition, 1913. Out of print.

*13. 1912 *The Reconstruction of Economic Theory.* Supp. to Annals, November, pp. 99.

14. 1916 *Advent Songs: A Revision of Old Hymns to Meet Modern Needs.* Huebsch. Out of print.

15. *Culture and War.* Huebsch, pp. 62.
16. 1917 *Songs of America.* Huebsch, pp. 32. Second edition, 1918. Out of print.
17. 1919 *Folk Lore: A Union of Religious, Patriotic and Social Sentiment Songs.* Huebsch, pp. 91.
18. 1922 *Mud Hollow.* Dorrance, pp. 384.

B. Periodicals

1. 1888 "The Stability of Prices."
Publication of American Economic Association. Series I, Vol. III, No. 6. Monograph, pp. 64.
2. "The Teaching of Mathematics."
Educational Monthly. Vol. IX, pp. 6-13 and 79-86; Vol. X, pp. 553-6.
*3. 1889 "The Effect of the Consumption of Wealth on the Economic Welfare of Society." Science Economic Discussion.
The Science Company. Volume of short papers.
*4. "Malthus and Ricardo."
Publication of American Economic Association. Series I, Vol. IV, No. 5, pp. 1-34.
5. "The Fundamental Idea of Capital."
Quarterly Journal of Economics, Oct., Vol. III, pp. 188-203.
*6. "President Walker's Theory of Distribution."
Quarterly Journal of Economics, Vol. IV, No. 1, pp. 34-49.
7. 1890 "The Principles of Rational Taxation."
Publications of the University of Pennsylvania. Political Economy and Public Law Series, No. 6.
Papers of Philadelphia Social Science Association, pp. 25. Out of print.
8. "The Decay of State and Local Governments."
Annals of the American Academy of Political and Social Science. Vol. I, No. 1, pp. 26-42.
9. "The Educational Value of Political Economy."
Publication of American Economic Association. Series I, Vol. V, No. 6. Monograph, pp. 36.
10. "The Educational Value of College Studies."
Educational Review, Feb., Vol. I, pp. 105-120.
11. 1891 "The Need of New Economic Terms."
Quarterly Journal of Economics, Oct., Vol. V, pp. 372-4.
12. "Economic Aspects of Technical Education" (Discussion).
Publications of American Economic Association, Series I, Vol. VI, pp. 115-22.
13. "A Contribution to the Theory of Railroad Rates" (Discussion).
Publications of American Economic Association, Series I, Vol. VI, p. 56.
14. "Another View of the Ethics of Land Tenure."
International Journal of Ethics, Vol. I, pp. 354-70.
15. 1892 "The Importance of Economic Psychology to Teachers."
American Institute of Instruction Lectures, pp. 1-21.
16. "The Economic Basis of Prohibition."
Annals of the American Academy of Political and Social Science, Vol. II, No. 1, pp. 59-68.

*17. "Can Economics Furnish an Objective Standard of Morality?" *Journal of Speculative Philosophy,* Sept., Vol. XXII, pp. 322-32.

*18. 1893 "The Economic Causes of Moral Progress." *Annals of the American Academy of Political and Social Science,* Vol. III, No. 2, pp. 129-49.

19. "The Ultimate Standard of Value" (Discussion). Publication of American Economic Association, Series I, Vol. VIII, p. 86.

20. "The Idea and Definition of Value" (Discussion). Publications of American Economic Association, Series I, Vol. VIII, p. 94.

21. "Cost and Utility." *Annals of the American Academy of Political and Social Science,* Jan., Vol. III, No. 4, pp. 409-28.

22. "Cost and Expense." *Annals of the American Academy of Political and Social Science,* May, Vol. III, No. 6, pp. 703-35.

*23. "Some Explanations Relating to the 'Theory of Dynamic Economics.'" *Quarterly Journal of Economics,* Oct., Vol. VII, pp. 177-86.

*24. "The Interpretation of Ricardo." *Ibid.,* pp. 322-352.

25. Discussion of "The Interpretation of Ricardo." Publications of American Economic Association, Series I, Vol. VIII, p. 77-82.

*26. "The Scope of Political Economy." *Yale Review,* Nov., Vol. II, pp. 364-87.

27. 1894 Same (Abstract). Publications of American Economic Association, Series I, Vol. IX, Sup. 62-4.

28. "The Failure of Biologic Sociology." *Annals of the American Academy of Political and Social Science,* May, Vol. IV, No. 6, pp. 919-47.

29. "The Beginning of Utility" (Briefer Communication). *Annals of the American Academy of Political and Social Science,* Sept., Vol. V, No. 2, pp. 257-60.

30. "The Place of University Extension." *University Extension,* Feb. Reprinted as No. 4 of a volume of pamphlets, 36 pp.

31. "The Organic Concept of Society" (Briefer Communication). *Annals of the American Academy of Political and Social Science,* Nov., Vol. V, No. 3, pp. 404-409.

32. 1895 "Economics in Elementary Schools." *Annals of the American Academy of Political and Social Science,* Jan., Vol. V, No. 4, pp. 461-89.

33. "The Relation of Sociology to Economics" (Discussion). Publications of American Economic Association, Series I, Vol. X, Sup. 107-10.

34. "The Teaching of Economics in the Elementary Schools" (Discussion). *Ibid.,* pp. 119-20 and 137-8.

35. "The Relation of Abstract to Concrete Sciences" (Briefer Communication).
Annals of the American Academy of Political and Social Science, May, Vol. V, No. 6, pp. 942-8.

36. "The Relation of Economics to Sociology" (Briefer Communication).
Annals of the American Academy of Political and Social Science, Jan., Vol. V, No. 4, pp. 577-83.

*37. "A New Statement of the Law of Population."
Political Science Quarterly, Vol. X, No. 1, pp. 44-61.

38. "Economic Psychology."
Journal of Education, Dec. 17, Vol. XLIV, pp. 412-13.

39. "The Formulation of Normal Laws with Special Reference to the Theory of Utility."
Annals of the American Academy of Political and Social Science, May, Vol. VII, No. 3, pp. 426-49.

40. "Abstract and Discussion of the Formulation of Normal Laws with Special Reference to the Theory of Utility."
Publications of American Economic Association, Vol. I, Sup. pp. 126-30.

41. "The Relation of Sociology to Psychology."
Annals of the American Academy, Nov., Vol. VIII, No. 3, pp. 433-60.

42. "The Sphere of Voluntary Organization in Social Movements" (Discussion).
Publications of American Economic Association, Series I, Vol. I, Sup. 158-9.

43. 1897 "Overnutrition and Its Social Consequences."
Annals of the American Academy of Political and Social Science, July, Vol. X, No. 1, pp. 33-53.

44. 1903 "Distribution by a Law of Rent" (Discussion).
Publications of American Economic Association, Series III, Vol. IV, pp. 169-70.

45. 1904 "Education Through Activity."
Charities and Commons, Aug. 6, Vol. XII, pp. 790-93.

46. "Young Wives in Industry."
Independent, Dec. 1, Vol. LVII, pp. 1244-9.

*47. "The Present Problems in the Economic Interpretation of History."
Annals of the American Academy, Nov., Vol. XXIV, No. 3, pp. 540-55.

48. 1905 "University Training for Business Men."
Educational Review, March, Vol. XXIX, pp. 217-33.

49. 1906 "New Adjustments for Women."
Independent, Sept. 20, Vol. LXI, pp. 674-81.

50. 1907 "A Program of Social Work."
Charities and the Commons, April, Vol. XVIII, pp. 97-103.

51. 1908 "Who Is the Good Neighbor?"
Charities and the Commons, Feb. 29, Vol. XIX, pp. 1642-6.

52. "Economic Interpretation of History."
Charities and the Commons, May 16, Vol. XX, pp. 228-9.

53. "Are Pensions for College Teachers a Form of Socialism?" *Science,* May 22, N. S. Vol. XXVII, pp. 822-4.

*54. "The Political Significance of Recent Economic Theories." *Annals of the American Academy,* July, Vol. XXXII, pp. 82-94.

55. "The Social Basis of Prohibition." *Charities and the Commons,* Sept. 19, Vol. XX, pp. 705-8

*56. "The Conflict Theory of Distribution." *Yale Review,* Aug., Vol. XVII, pp. 156-84.

57. "Better and Inspiration of Oxygen Than of Alcohol." *Charities and the Commons,* Vol. XXI, pp. 299-300.

58. "The Laws of Social Attraction." *Popular Science Monthly,* Oct., Vol. LXXIII, pp. 354-60.

59. 1909 "Principles of Economic Interference." *Survey,* April 3, Vol. XXII, pp. 14-16.

60. "Wise Words About Some Foolishness." *Educational Review,* Mar., Vol. XXVII, pp. 293-8.

61. "Product and Climax." *Survey,* June 5, Vol. XXII, p. 344.

62. "Portrait." *Cosmopolitan,* May, Vol. XLVI, p. 669.

*63. "The Making of Economic Literature." President's Address, American Economic Association. Publication of American Economic Association, Series III, Vol. X, pp. 1-14. Published in *The Economic Bulletin,* Vol. I, No. 4, pp. 290-300.

64. 1910 "Portrait." *Independent,* Jan. 6, Vol. LXVIII, p. 8.

65. "The Crisis in American Home Life." *Independent,* Feb. 17, Vol. LXVII, pp. 216-17.

66. "The Theory of Prices in Modern Economics." *Independent,* April 7, Vol. LXVIII, pp. 742-6.

67. "The Phenomena of Economic Dynamics" (Discussion). Publications of American Economic Association, Series III, Vol. XI, pp. 127-130.

68. 1911 "University Fellowships." *Science,* Feb. 10, N. S. Vol. XXXIII, pp. 216-17.

69. "Construction Versus Distribution." *Survey,* Feb. 18, Vol. XXV, pp. 866-7.

70. "The Social Basis of Religion." *Survey,* March 4, Vol. XXV, pp. 909-15.

71. "Is Christianity Ethics or Religion?" *Independent,* March 30, LXX, pp. 655-7.

72. "The Method of Science: a Reply" (Reply to a Criticism of Dr. Minot in *Science* for Jan. 27, 1911). *Science,* April 14, Vol. XXXIII, pp. 578-83.

73. "An Economic Measure of School Efficiency." *Educational Review,* May, Vol. XLI, pp. 467-79.

74. "Ideals of Progress." *Survey,* June 3, Vol. XXVI, pp. 387-92.

75. "The Church as a Social Institution."
Independent, July 20, Vol. LXXI, pp. 131-3.

76. "The Laws of Environmental Influence."
Popular Science Monthly, Oct., LXXIX, pp. 396-407.

77. "The World's Peace in the Making."
World's Work, Dec., Vol. XXIII, pp. 155-56.

*78. "Pragmatism and Social Science."
Journal of Philosophy, Psychology, and Scientific Methods," Vol. VIII, pp. 633-60.

79. 1912 "Theories of Progress."
American Economic Review, Vol. II, pp. 61-68.

80. "Social Reform and Politics."
Survey, April 27, Vol. XXVIII, pp. 173-4.

81. "Types of Men."
Popular Science Monthly, March, Vol. LXXX, pp. 273-79.

*82. "The Revival of Economic Orthodoxy."
Popular Science Monthly, Sept., Vol. LXXXI, pp. 246-49.

83. "Wanted, a New Kind of Social Worker."
Survey, Nov. 2, Vol. XXIX, pp. 116.

84. "Shall Woman Be a Tool or Partner?"
Twentieth Century Magazine, July, Vol. VI, pp. 58-62.

*85. "The Background of Economic Theories."
Publication of American Sociological Society, Vol. VII, pp. 58-62. Also in *American Journal of Sociology,* March, 1913, Vol. XVIII, pp. 689-93.

86. "Social Hymns."
Survey, Dec. 7, Vol. XXIX, pp. 275.

87. 1913. "Borrowed Plumes."
Craftsman, Jan., Vol. XXIII, pp. 489-90.

88. "Extravagance as a Virtue."
Current Opinion, Jan., Vol. LIV, pp. 51-2.

89. "The Relation of Voluntary to Political Action."
Survey, Jan. 4, Vol. XXIX, pp. 421-22.

90. "Facts About the Accounts of Learned Societies."
Science, March 7, Vol. XXXVII, pp. 371.

91. "The Professor on the Rampage."
Nation, June 12, Vol. XCVI, pp. 591-92.

92. "The Reorganization of Social Work."
Survey, July 5, Vol. XXX, pp. 468-72.

93. "The Standardization of Family Life."
Annals of the American Academy, July, Vol. XLVIII, pp. 81-90.

94. "The Genesis of Personal Traits."
Popular Science Monthly, Aug., LXXXIII, pp. 149-57.

95. "Why the Study of Languages Weakens the Will."
Current Opinion, Oct., Vol. LV, pp. 255-6.

96. "New Year Resolutions."
Survey, Dec. 27, Vol. XXXI, pp. 360-62.

97. "The New Jurisprudence."
University of Penna. Law Review, Nov., Vol. LXII, pp. 1-16.

98. 1914 "Hymn Writing."
Survey, Jan. 3, Vol. XXXI, pp. 403-4.

99. "The Revision of American Policies."
Annals of the American Academy, July, Vol. LIV, pp. 191-200.

100. "The Evolution of a New Woman."
Annals of the American Academy, Nov., Vol. LVI, pp. 111-21.

101. "Responsibility for the War."
New Republic, Nov. 14, Vol. I, pp. 21-2.

102. 1915 "Economic Fallacies That Favor War."
Moody's, Jan., Vol. XVIII, pp. 13-17.

103. "War and the Stock Market."
Moody's, March, Vol. XVIII, pp. 113-15.

104. "The Future of the Stock Market."
Moody's, April, Vol. XVIII, pp. 161-3.

105. "Becoming American."
Open Court, July, Vol. XXIX, pp. 385-93.

106. "The Slump in Morality."
New Republic, Sept. 11, Vol. IV, pp. 155.

107. "The Morality of Force."
New Republic, Oct. 16, Vol. IV, pp. 286.

108. "Economic Zones and New Alignments of National Sentiment."
Survey, March 6, Vol. XXXIII, pp. 612-13.

109. "The Unnatural Boundaries of European States."
Survey, April 3, Vol. XXXIII, pp. 24-37.

110. "Territorial Expansion."
The University of Penna. Lectures, 1914-15, pp. 199-209.

111. "The German Way of Thinking."
Forum, July, Vol. LIV, pp. 18-26.

112. "The Financial Menace to America of the European War."
Annals of the American Academy, July, Vol. LX, pp. 123-29.

113. 1916 "Taxation After the War."
Annals of the American Academy, March, Vol. LXIV, pp. 210-14.

*114. "The Basis of National Security."
Annals of the American Academy, July, Vol. LXVI, pp. 1-11.

115. "The Day of Financial Reckoning."
Moody's, Jan., Vol. XIX, pp. 61-6.

116. 1917 "The Track of Evolution."
Science Monthly, Oct., Vol. V, pp. 350-8.

117. "The Mechanism of Mind."
Annals of the American Academy, May, Vol. LXXI, pp. 202-15.

*118. "Peace Without Force."
Annals of the American Academy, July, LXXII, pp. 31-40.

119. "Problems of War Finance."
Yale Review, Oct., Vol. VII, pp. 73-89.

120. 1918 "The Tomorrow of Finance."
Annals of the American Academy, March, Vol. LXXVI, pp. 257-71.

*121. "The Fallacy of Price Bidding."
Annals of the American Academy, July, Vol. LXXVIII, pp. 129-43.

122. "Liquidation Taxes."
Annals of the American Academy, Jan., Vol. LXXV, pp. 165-81.

*123. "Mandeville in the Twentieth Century."
American Economic Review, Vol. VIII, pp. 88-98.

124. 1919 "Making National Debts National Blessings."
Annals of the American Academy, March, Vol. LXXXII, pp. 39-51. Same condensed, *Survey,* March 1, Vol. XLI, pp. 785-86.

125. "The Genesis of Consciousness."
The Monist, Vol. XXIX, pp. 432-47.

126. "The Divided Self."
The Monist, Vol. XXIX, pp. 223-27.

127. 1920 "Backsliding on Social Work."
Survey, June 5, Vol. XLIV, pp. 338-43.

128. "An Analysis of Mental Defects."
The Monist, Vol. XXX, pp. 107-25.

129. "Cosmic Processes."
The Monist, Vol. XXX, pp. 406-42.

*130. "The Failure of Liberal Idealism."
The Freeman, July 14 and 21, Vol. I, pp. 419-21 and 444-6.

II. Reviews, Criticisms and Appreciations

A. Books

1. "Premises of Political Economy."
E. Leser. *Jahrbucher fur Nationalokonomie und Statistik,* N. F., Bd. XIV, pp. 267-74.

2. "Economic Basis of Protection."
Ugo Rabbeno. American Commercial Policy. Third Essay, Chapter IV. Macmillan and Co., London. Out of print.
Economic Journal, Vol. I, pp. 596.
M. F. Rouxel. *Journal of Economistes.* 5. ser. t. XLI, pp. 291-3.
Pierre Ridoire. *La Reforme Sociale.* 4. Ser. t. 9, pp. 976.
Ch. Gide. *Revue d'Economie Politique.* t. 5, pp. 410-12.

3. "Theory of Dynamic Economics."
John Bates Clark. *Annals,* Vol. III, pp. 31-44.
Economic Journal, Vol. II, pp. 687.

4. "Theory of Social Forces."
W. Caldwell. A Reply to the Theory of Social Forces. *The International Journal of Ethics,* July, 1897.

5. "Theory of Prosperity."
H. R. Seager. *Annals,* Vol. XIX, pp. 239-55.
S. E. Simmons. *American Journal of Sociology.* Vol. VIII, pp. 122-9.
Gunton's, Vol. XXIV, pp. 76-85.
A. S. Johnson. *Pol. Science Quart.,* Vol. XVII, pp. 313-19.
S. Ball. *Economic Review,* Vol. XII, pp. 501-2

G. Brodnitz. *Jahrbucher fur Nationalokonomie und Statistik,* III, Folge, Bd. XXXI, pp. 398.
The Independent, Vol. LIV, pp. 2336-7.
The Nation, Vol. LXXIV, pp. 74.
Economic Journal, Vol. XII, pp. 370.

6. "Development of English Thought."
Economic Journal, Vol. IX, pp. 417.
Chas. de Garmo. *Educational Review,* Vol. XVII, pp. 484-8.
M. Smith. *Political Science Quart.,* Vol. XV, pp. 112-19.
C. R. Henderson. *Dial,* Vol. XXVIII, pp. 436-7.
S. Ball. *Economic Review,* Vol. X, pp. 114-18.
K. Diehl. *Jahrbucher fur Nationalokonomie und Statistik,* III, Folge, Bd. XX, pp. 68.

7. "The New Basis of Civilization."
Charities and the Commons, Vol. XVIII, pp. 135-36.

8. "Heredity and Social Progress."
G. N. Calkins. *Pol. Sci. Quart.,* Vol. XVIII, pp. 539-41.
The Nation, Vol. LXXVI, pp. 483.
Gunton's, Vol. XXV, pp. 167-70.
Annals, Vol. XXII, pp. 366-9.
Charities and the Commons, Vol. XI, pp. 316-18.
R. R. Marett. *Economic Review,* Vol. XIII, pp. 498-501.
G. M. Whipple. *Educational Review,* Vol. XXVII, pp. 309-12.

9. "The Reconstruction of Economic Theory."
B. M. Anderson, Jr. *Pol. Sci. Quart.,* Vol. XXVIII, pp. 123-29.

10. "Advent Songs."
Current Opinion, Vol. LXI, pp. 331.

11. "Mud Hollow."
J. H. Willits. *Annals,* Vol. CIII, pp. 15.
The Literary Review, July 29, 1922, pp. 842.
The New York Times, May 28, 1922, pp. 16.
W. M. Leiserson. *Survey,* Vol. XLVIII, pp. 627.
The Times (London), Lit. Supplement, June 1, 1922, pp. 366.

B. Periodicals

1. "The Stability of Prices."
Bohm-Bawerk. *Jahrbucher fur Nationalokonomie und Statistik,* N. F. Bd. XVIII, pp. 672, 678.
J. L., *Jahrbucher fur Nationalokonomie und Statistik,* N. F. Bd. XXI, pp. 98-99.

2. "Mandeville in the Twentieth Century."
J. H. Hollander and E. R. A. Seligman. *American Economic Review,* Vol. VIII, pp. 338-49.

3. "The Day of Financial Reckoning."
W. F. Hickernell. *Moody's,* Feb., 1916, Vol. XIX, pp. 61-6.

4. "Fundamental Idea of Capital."
Bohm-Bawerk. *Jahrbucher fur Nationalokonomie und Statistik,* N. F. Bd. XVIII, pp. 672, 678.

5. "Educational Value of Political Economy."
K. Diehl. *Jahrbucher fur Nationalokonomie und Statistik,* III, Folge, Bd. II, pp. 279-80.
Educational Review, Vol. I, pp. 512.

C. Appreciations

1. "Appreciation."
   The Survey, July 1, 1922, Vol. XLVIII, pp. 477-8.
2. "To Simon N. Patten, A Poem."
   Guy Nearing. *The Survey,* April 21, 1917, Vol. XXXVIII, pp. 55.
3. "Educational Frontiers."
   Scott Nearing. (A large portion of the book is devoted to a discussion of Simon N. Patten as a teacher.) Thomas Seltzer, Inc. New York.
4. "Notes on the Life and Work of Simon N. Patten."
   Rexford G. Tugwell. *Journal of Pol. Econ.,* April, 1923, Vol. XXXI, No. 2, pp. 153-208.
5. Memorial Volume of Appreciations by American Scholars for S. N. Patten, read at the Memorial Meeting of the American Economic Association at Chicago, December 29, 1922.
   Published as a Supplement to the Proceedings of the Annual Meeting in 1922. *Am. Econ. Review,* Vol. XII.
6. Memorial Addresses on the Life and Services of Simon N. Patten.
   Supplement to the *Annals of the American Academy of Political and Social Science,* May, 1923.
7. (*) "Essays in Economic Theory," Edited by R. G. Tugwell, Introduction by H. R. Seager. Alfred A. Knopf. (The Introduction to this book is a biographical sketch. The book contains twenty-three of Patten's essays, most of which had previously appeared in periodicals. The works contained in this volume are marked by an asterisk above.

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